

**UNIVERSITY OF KWAZULU-NATAL**

**The influence of agricultural cooperatives on the sustainability of rural livelihoods in  
KwaZulu-Natal, South Africa**

**by**

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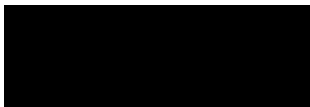
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## **Dedication**

To my wife, children, friends and relatives.

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I extend my heartfelt gratitude to Almighty God for His grace, guiding me through the challenging journey of completing my thesis. My sincere appreciation goes to my wife and children for their endless prayers and steadfast support, which served as a source of inspiration during the demanding phases of this academic pursuit.

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## Abstract

Rural livelihoods in KwaZulu-Natal, South Africa, are linked to the agricultural sector, where the establishment of agricultural cooperatives has gained significance as a potential catalyst for sustainability. This study explores the profound influence of agricultural cooperatives on the sustainability of rural livelihoods in KwaZulu-Natal, South Africa. The purpose of this study is to explore the extent to which agricultural cooperatives influence the well-being and economic stability of rural communities in this region. The research problem at hand centres on the pressing need to address poverty, food security, and economic disparities among rural populations. Qualitative methodology was employed to gain an in-depth understanding of the subject matter. The population under study comprises rural residents of KwaZulu-Natal who are actively engaged in agricultural cooperatives. A purposive sampling technique was used to select forty-seven participants for this research, with fifteen engaging in semi-structured face-to-face interview and thirty-two involved in the eight-member focus group discussion. Data collection instruments included semi-structured interview and focus group discussion. Thematic data analysis was utilised using Nvivo version 14. Findings revealed that these cooperatives enhance rural income stability by improving agricultural practices and market access, foster social cohesion and knowledge sharing, and support environmental sustainability through eco-friendly farming, natural methods, and collaborative innovation among community members. However, several challenges, including limited access to resources and capacity-building, hinder their full potential. The study concluded that agricultural cooperatives can significantly contribute to the sustainability of rural livelihoods in KwaZulu-Natal. However, addressing challenges and strengthening the support systems for these cooperatives is essential to maximise their positive impact. Therefore, it is recommended that government agencies, NGOs, and other stakeholders should collaborate to provide support, training, and resources to strengthen agricultural cooperatives in the region. Moreover, a holistic approach that accounts for economic, social, and environmental dimensions is necessary for promoting sustainable rural development.

**Key Words:** Agricultural cooperatives; Livelihood; Rural community; Sustainability; KwaZulu-Natal province.

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## **Abbreviations and Acronyms**

AGM	Annual General Meeting
BFAP	Bureau for Food and Agricultural Policy
CCA	Canadian Cooperative Association
CFIs	Cooperative Financial Institutions
CIPC	Corporate and Intellectual Property Commission
CIPRO	Companies and Intellectual Property Commission
CIS	Cooperative Incentive Scheme
CPR	Common Pool Resource
DAFF	Department of Agriculture, Forestry and Fisheries
DFID	Department for International Development
DSBD	Department of Small Business Development
DTI	Department of Trade and Industry
EU	European Union
FAO	Food and Agriculture Organization
GDP	Gross Domestic Product
HDI	Human development index
ICA	International Cooperative Alliance
ICMIS	Intensive Cooperative Management Improvement Scheme
ILO	International Labour Organisation
KZN	KwaZulu Natal
NACSA	National Apex Cooperative of South Africa
NCFC	National Council of Farmer Cooperatives
NGCs	New Generation Cooperatives
NGOs	Non-Governmental Organisations
ROSCAs	Rotating savings and credit associations
RSA	Republic of South Africa
SANACO	South African National Apex Cooperative

SAPs	Structural Adjustment Programs
SCC	Swedish Cooperative Centre
SDGs	Sustainable Development Goals
SEDA	Small Enterprise Development Association
SLF	Sustainable Livelihoods Framework
SSA	Statistics South Africa
TBL	Triple Bottom Line
UKZN	University of KwaZulu-Natal
UN SDSN	United Nation Sustainable Development Solutions Network
UN	United Nations
UNDP	United Nations Development Programme
USAID	United States Agency for International Development
WHO	World Health Organisation

## **CHAPTER ONE: INTRODUCTION**

### **1.1 Introduction**

Agricultural cooperatives play a pivotal role in shaping the socio-economic landscape of rural areas, particularly in developing nations where farming is a primary source of income. In South Africa, where agriculture remains a cornerstone of the rural economy, cooperatives provide a framework for small-scale farmers to pool resources, share knowledge, and access markets. This collective approach is increasingly seen as essential for promoting sustainable development, addressing challenges of food security, and improving the overall well-being of rural communities. As such, understanding the role of agricultural cooperatives in fostering sustainability is crucial for shaping effective policies and interventions.

The sustainability of rural livelihoods, however, extends beyond economic survival. It encompasses environmental stewardship, social equity, and long-term resilience against external shocks, such as climate change or economic volatility. Agricultural cooperatives, by their nature, offer the potential to enhance these dimensions of sustainability by promoting collaboration, resource efficiency, and knowledge-sharing. Yet, the extent to which these cooperatives succeed in achieving sustainable outcomes is not uniform and can vary significantly based on local contexts, governance structures, and external support systems. This research explores the influence of agricultural cooperatives on the sustainability of rural livelihoods in South Africa through examining how cooperatives contribute to economic, social, and environmental dimensions of sustainability in different rural settings. By examining the successes, challenges, and limitations faced by these organisations, this research purposes to provide a comprehensive understanding of their impact, offering insights that could inform future policy development and the promotion of sustainable rural development in South Africa.

### **1.2 Background to the Study**

In the contemporary era, the dynamics between farmers, communities, and the natural environment are undergoing significant changes due to resource depletion, population growth, environmental strain, evolving social norms, technological advancements, and the intensifying impacts of climate change. Kalogiannidis (2020) emphasises that collaboration and the establishment of cooperatives in the agricultural sector play a crucial role in supporting small farmers as they navigate heightened competition. Cooperatives offer an alternative organisational model that promotes societal well-

being and sustainable development (Francesconi & Wouterse, 2021). Beyond economic benefits, cooperatives integrate social, economic, and environmental factors, which are inherently interconnected. This research seeks to explore the influence of agricultural cooperatives on the sustainability of rural livelihoods in KwaZulu-Natal, South Africa.

Ortmann and King (2017) trace the origins of cooperatives to Europe, where they emerged as a response to the severe famine and hardships experienced during the 1840s, before their expansion into industrialised nations in the late 19th century. In Western countries, agricultural cooperatives hold a substantial share in agri-food supply chains, accounting for more than 50% of the market in countries such as Austria, Denmark, Finland, France, Ireland, the Netherlands, and Sweden (Candemir, Duvaleix & Latruffe, 2021). Cooperative development, however, is often seen as a response to extreme poverty. Rogan and Alferts (2020) argue that cooperatives have evolved into a powerful global force, complementing the efforts of governments and large corporations in enhancing human dignity.

In developed countries, cooperatives have gained prominence as a mechanism for communities to provide mutual and public assistance, particularly in instances where markets fail (Francesconi & Wouterse, 2021). In Indonesia, the establishment of cooperatives in the 20th century aimed to foster collaborative economic development, with the overarching goal of enhancing societal welfare (Papilaya, Rijal & Papilaya, 2021). In rural areas, agricultural cooperatives play a pivotal role in the food supply chain, facilitating both the processing and marketing of food products. Pitman (2018) notes that cooperative movements in the United States emerged between 1750 and 1850 in response to inequalities in land tenure systems, as small farmers migrated from rural areas to urban centers in search of employment. According to Bretos, Errasti, and Marcuello (2020), the United States now hosts over 29,000 cooperative businesses spanning various sectors, including utilities, employment services, food retail, housing, finance, childcare, and agriculture. These cooperatives employ millions of individuals, generating over \$3 trillion in assets and contributing more than \$500 billion in annual revenue.

In Africa, member-controlled cooperatives are prevalent in rural communities, with data suggesting that nearly every rural locality has at least one cooperative (Lomuria, Wanyama & Mamuli, 2020). Research on African agricultural cooperatives indicates that membership offers smallholders access to subsidised inputs and services provided by donors and governments. These services extend beyond

agricultural assistance, including support for labor-intensive activities like planting and harvesting, as well as financial aid for personal events such as weddings, funerals, and medical expenses (Francesconi & Wouterse, 2021).

Schwettmann (2022) notes that approximately 40% of African households are involved in cooperatives in some capacity. The cooperative movement represents the largest non-governmental organisation in Africa, playing a pivotal role in employment generation across many African economies. A study conducted by the International Labour Organisation (ILO) in 2017 found that cooperatives were responsible for creating approximately 16 million direct jobs across 15 African nations. Abera, Haji, Legesse, and Sassi (2021) further affirm the essential role cooperatives play in generating employment opportunities. Kuguru, Jaensson, and Nganga (2022) highlight the cooperative movement in Kenya as one characterised by robust growth and a long-standing history. Since independence, Kenya's cooperatives have significantly contributed to the national economy, supporting approximately 80% of the population (Schwettmann, 2022). In Ethiopia, cooperatives are seen as key players in poverty reduction programs and development initiatives (Serra & Davidson, 2021). The Ethiopian government recognises cooperatives as vital tools in implementing agricultural development programs (Sebhatu, Gezahegn, Berhanu, Maertens, Van Passel & D'Haese, 2021). Nevertheless, Schwettmann (2022) argues that employment planners, social partners, and donor organisations often overlook cooperatives' contributions to employment creation.

In South Africa, agricultural cooperatives have historically been established to empower smallholder farmers by pooling resources, improving access to markets, and enhancing bargaining power (Ariyanto, 2023). In rural areas such as KwaZulu-Natal, where poverty, inequality, and unemployment are prevalent, cooperatives are often seen as a viable strategy for promoting economic development and social cohesion. Nyawo (2023) opines that by offering farmers greater access to resources, cooperative models can increase productivity, improve household income, and contribute to the broader sustainability of rural communities. KwaZulu-Natal is one of South Africa's most agriculturally productive provinces, with diverse farming systems ranging from commercial to smallholder farming (Govender, Pillay, Siwela, Modi & Mabhaudhi, 2021). However, despite the region's agricultural potential, many rural households face challenges that threaten the sustainability of their livelihoods. These include limited access to credit, inadequate infrastructure, fluctuating commodity prices, and vulnerability to climate change (Moyo & Gasva, 2022). Agricultural

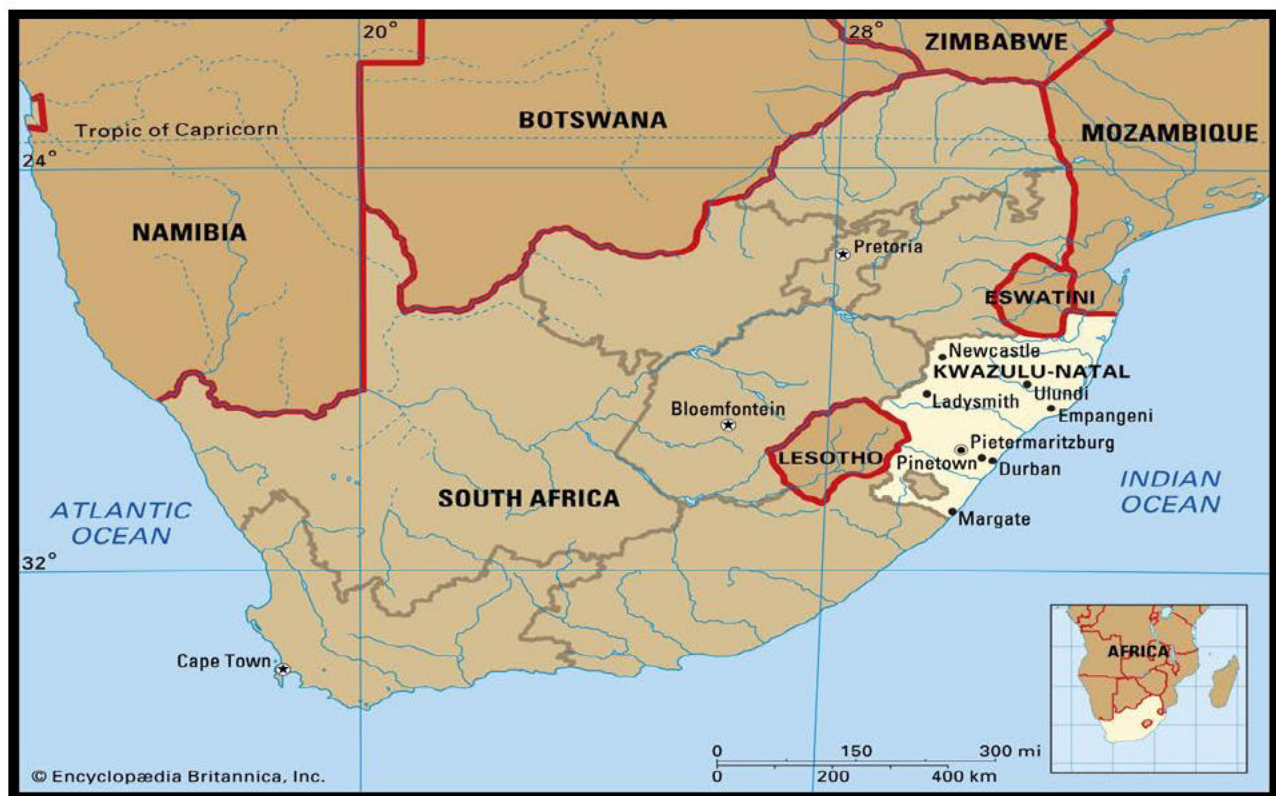
cooperatives, in this context, are positioned as a critical mechanism for addressing some of these challenges. Lipatova, Mamai, Mamai, Gazizyanova and Galenko (2021) claim that by encouraging collective action, cooperatives can reduce input costs, enable knowledge sharing, and promote practices that enhance the resilience of rural farming systems to environmental and economic pressures.

Agricultural cooperatives in South Africa, including KwaZulu-Natal, make notable contributions to the country's employment, GDP, and poverty reduction efforts. Nationally, cooperatives are responsible for creating approximately 300,000 jobs across various sectors, with the agricultural sector being a significant contributor (Department of Small Business Development (DSBD), 2020). The International Labour Organization (ILO) estimates that cooperatives globally generate around 10% of all employment, and similar trends are observed in South Africa's rural economy (ILO, 2021). In terms of GDP, cooperatives contribute roughly 0.5% to South Africa's total GDP (South African National Apex Cooperative, 2020). Although modest in scale, this contribution is vital in regions like KwaZulu-Natal, where agriculture remains a key driver of rural development (Stats SA, 2021). Furthermore, cooperatives have been linked to poverty alleviation, particularly through their role in improving income for small-scale farmers and creating employment in rural areas. According to the World Bank (2021), poverty rates in South Africa have declined, and cooperative structures have been instrumental in driving inclusive economic growth in underdeveloped regions like KwaZulu-Natal. The impact of cooperatives in these areas is further reinforced by their ability to empower women and youth, demographic groups that are disproportionately affected by poverty, thus enhancing social and economic resilience (World Bank, 2021).

It is therefore against this background that this study seeks to examine the influence of agricultural cooperatives on the sustainability of rural livelihoods in KwaZulu-Natal, examining their economic, environmental and social impacts. Through an exploration of cooperative structures, governance, and member participation, the research aims to evaluate the extent to which cooperatives contribute to improving rural households' access to resources, income stability, and food security. Furthermore, the study assesses the role of agricultural cooperatives in fostering community resilience, enhancing local development, and contributing to the long-term sustainability of rural livelihoods in the region.

### **1.2.1 South Africa as a Nation**

South Africa, officially known as the Republic of South Africa (RSA), is situated at the southernmost tip of the African continent. It is bordered by the South Atlantic and Indian Oceans to the south, while its northern border is shared with Zimbabwe, Botswana, and Namibia. Lesotho, a landlocked country, forms the eastern and north-eastern borders. Approximately 10.3% of South Africa's total land area, equivalent to around 12 million hectares, has soil with moderate to high agricultural potential (Stats SA, 2021). However, when considering suitable climatic conditions, this percentage decreases to approximately 1.8%, or slightly over 2 million hectares (Strauss, Swanepoel, Smith & Smit, 2021). The country's rainfall patterns divide South Africa into three distinct climate zones. Only a small portion of the eastern border experiences consistent year-round precipitation, while the southwest region receives significant winter rainfall. Mathinya, Franke, Van and Giller (2022) assert that the largest climate zone in South Africa is the summer rainfall zone, which is home to the majority of small-scale farmers and rural communities.



**Figure 1.1. Location of South Africa on the African Continent (Catana, 2020:172)**

The agricultural sector in South Africa exhibits a dualistic nature, comprising a large and diverse segment with extensive supply networks, alongside a significant number of underdeveloped small farms (Strauss et al., 2021). Consequently, there is considerable variation in farm sizes and

agricultural output across the country. According to Stats SA (2020), there are over 300,000 small-scale farming units, whereas the number of large-scale farms is 40,122. Additionally, the 2019 general household survey revealed that 2.3 million households engaged in subsistence-oriented agricultural activities (Stats SA, 2020). However, despite their higher numbers, small-scale farmers contribute only a modest share to national food production, with the large-scale sector accounting for nearly 95% of the agricultural goods sold on farms that have an average size of 2113 hectares (Mathinya et al., 2022).

While small-scale farmers play a crucial role in local food systems, it is widely acknowledged in scientific and policy publications that their productivity per unit of land falls below that of large-scale farmers (Strauss et al., 2022). This phenomenon is not unique to South Africa but is observed globally. Silva and Giller (2020) argue that the relatively lower productivity of small-scale farmers in South Africa is often attributed to the perceived "low agricultural potential" of the bioregions where most of them are located. These settlements primarily exist in the summer rainfall bioregion in the eastern part of the country, which historically comprised the homelands. This region experiences a mild, semi-arid climate with intermittent summer rainfall. Unlike many other African countries where smallholder agriculture prevails, South Africa's agricultural landscape is distinctive in that farmers from opposite ends of the scale coexist within the same bioregion, often separated by mere boundaries like ditches or fences (Gumede, Durden & Govender, 2022).

In addition to biophysical factors, the agricultural potential of South Africa is influenced by management practices, which are shaped by the socio-economic backgrounds of those responsible for these agricultural landscapes (Mathinya et al., 2022). While large-scale farmers exhibit higher productivity, they face various challenges. The expansion and mechanisation of their farms have led to increased labor costs, resulting in job losses and vulnerability among farm laborers and their families (BFAP, 2020).

The summer rainfall region is divided into seven provinces: KwaZulu Natal (KZN), Limpopo (LP), the Eastern Cape (EC), Gauteng (GP), Mpumalanga (MP), the Free State (FS), and the North West (NW). According to Strauss et al. (2022), the uniqueness of South Africa's agricultural landscape is intertwined with the country's historical and political context, which has linked farming to racial implications, with commercial farming associated with white people and subsistence farming associated with black people. In an effort to address this, the government has sought to create a class

of black farmers known as "emerging farmers" (Malomane, 2019). This group includes beneficiaries of land reform initiatives and agricultural cooperatives that have seized opportunities to enter the agricultural sector. It is important to highlight this group as they have been recipients of significant government investment in land reform projects. While some have encountered challenges and failed due to the models employed, there have also been successful examples of black large-scale farmers who have independently entered the market (Zantsi, 2021b).

Both commercial and subsistence farmers primarily engage in dry-land farming and cattle ranching, with limited areas of irrigation utilised by commercial farmers. Subsistence farmers mainly cultivate field crops for personal consumption, occasionally selling surplus produce during prosperous years to supplement their low incomes, often reliant on social assistance (Govender et al., 2021). In terms of overall farming revenue in 2019, commercial farmers in the provinces of Free State, KZN, and Eastern Cape contributed 14.1 percent, 10.2 percent, and 8.1 percent, respectively, while subsistence farmers made no significant contribution (Zantsi, 2021).

As one reaches the Drakensburg escarpment, the farming region in the summer rainfall zone is primarily flat and undulating, eventually turning steep. The height of the area varies widely, ranging from 300 meters above sea level in the lowlands to over 2800 meters in the Drakensburg Mountains (Govender et al., 2021). A gradient over the landscape, increasing from west to east, indicates that annual rainfall in farming districts ranges from 400 mm to more than 2000 mm. With an aridity index between 20 percent and 40 percent, summertime (October to March/April) is when most rain falls (Govender et al., 2021). Summers in the area are moderate to hot, and winters are frigid. Frost incidence rises with elevation. The red-yellow-gray lactose plinth catena dominates the soil cover, taking up more than half of the region. Black and red clays, as well as well-drained sandy soils, are other forms of soil (Strauss et al., 2021).

### **1.2.2 The Province of KwaZulu-Natal**

KZN is one of South Africa's nine provinces, bordered by Mozambique, Swaziland, Eastern Cape, the Indian Ocean, Free State, Lesotho, and Mpumalanga. The province's capital is Pietermaritzburg, while its largest city is Durban (Stats SA, 2015). KZN consists of one metropolitan region, ten districts, and fifty municipalities. The districts of the KZN province, as well as their local municipalities, are listed in Table 1.1 below. The majority of the province is hilly or mountainous,

particularly along the western border, with the land rising to over 3,300 meters along the Drakensberg Escarpment (Oladejo & Ilesanmi, 2023). The landscape is characterised by rocky outcrops, creating a series of steps from the coastal plain to the central Midlands region. The climate in KZN ranges from sub-tropical to moderate, with varying levels of precipitation and temperatures (Henriksson et al., 2019). The coastal area experiences hot temperatures with occasional rain, while the inland regions have milder temperatures and lower rainfall. The province's highest elevations in the Drakensberg can be cold, with snowfall during winter. KZN is renowned for its scenic beauty and is a popular tourist destination in Southern Africa.

**Table 1.1: Province of KwaZulu-Natal districts and municipalities**

District	Local Municipalities
ILembe	Mandeni, Ndwedwe, Maphumulo and KwaDukuza.
uMgungundlovu	uMshwathi, Impendle, Mpofana, Mkhambathini, Msunduzi, uMngeni and Richmond.
Umkhanyakude	uMhlabuyalingana, Hlabisa, Mtubatuba, Jozini, and the big 5 False Bay.
Zululand	uPhongolo, AbaQulusi, Ulundi and eDumbl.
Amajuba	Dannhauser, Newcastle and eMadlangeni.
uMzinyathi	uMvoti, Endumenil, Nquthu and uMsinga
UThungulu	City of uMhlathuze, uMlalazi, Mthonjaneni, Ntambanana, Nkandla, and uMfolozi.
uThukela	uMtshezi, Emnambiti, Okhahlamba and Imbabazane.
Harry Gwala	Greater Kokstad, Ingwe, kwaSani, Ubuhlebezwe and uMzimkulu
Ugu	Vulamehlo, Eziqoleni, uMdoni, Hibiscus Coast, uMuziwabantu, and uMzumbe

**Source: Author's own creation (2023)**

KZN province, the second most populous province in South Africa, is home to approximately 12.4 million people, representing 19.9% of the country's total population (Stats SA, 2022). The province has a diverse population comprising various ethnic groups. The majority of the population, around

86.9%, is of black African descent, predominantly Zulu, while Asians of Indian origin make up 7.5% of the population (Stats SA, 2022). The white population, primarily of European descent, accounts for 4%, and the colored community represents 1.3%. Most residents are concentrated along the coastal areas and in the central part of the province, with lower population densities in the northeast and extreme west. Rural areas with rugged terrain are predominantly inhabited by black communities, while white residents are concentrated in or near Durban (Govender et al., 2021). Over the years, the black African population has significantly increased, while the colored, Indian, and white populations have declined. The majority of people in KZN speak isiZulu, comprising 77.8% of the population (Stat SA, 2018). The province has witnessed a decrease in informal and traditional households, with a rise in formal residences. The majority of residents fall within the 15-64 age group, with females slightly outnumbering males (Stat SA, 2022).

### **1.2.3 Cooperatives in South Africa**

In 2004, the South African government introduced its first clear cooperative policy to address the instability caused by fragmented laws in the cooperative sector. Department of Trade and Industry (DTI) (2004) claimed that this policy aimed to uphold the globally recognised principles and ideals of the cooperative movement in South Africa. It served as the foundation for various initiatives, including the Corporate and Intellectual Property Commission (CIPC), the C-operative Strategy (2004-2014), and the Cooperative Act of 2005 (Mushonga et al., 2019). The DTI, specifically the Registrar of Cooperatives office, took responsibility for the legal framework, strategy, and planning of the cooperative sector. The Department of Small Business Development (DSBD) oversaw the coordination and management of cooperative activities. In 2010, the DTI introduced the Cooperative Incentive Scheme (CIS), providing registered primary cooperatives with a 100% grant of up to R350,000 to enhance their profitability and competitiveness. The CIS successfully supported 1,527 cooperatives with a total funding of R152.7 million in the 2012/2013 financial year (DTI, 2014). Towards the end of the Cooperative Strategy's timeframe, the government developed a comprehensive strategy called the "Integrated Strategy on the Development and Promotion of Cooperatives (2012-2022)." This strategy focused on expanding non-financial support services, creating demand for cooperative products and services, strengthening cooperative sustainability, and enhancing financial support services for cooperatives (DTI, 2017).

The Cooperatives Act of 2005, also known as Act No. 14 of 2005, was implemented to facilitate the formation and registration of cooperatives in South Africa. It introduced provisions for the

establishment of a Cooperatives Advisory Board, the winding up of cooperatives, and the repeal of Act 91 of 1981, among other matters (RSA, 2005). The Act outlined the government's responsibilities and obligations towards the cooperative movement, including cooperative registration, information dissemination, and support through various departments, ministries, and agencies. DTI (2014) alluded that the key objective of the Act was to promote the development of long-term black-owned cooperatives, particularly in rural and economically disadvantaged areas.

The formal legislative framework resulted in a surge of newly formed black-owned cooperatives, with a significant increase in registrations following the passage of the Cooperative Amendment Act No. 6 of 2013 (DSBD, 2020). Government encouragement and support for cooperative registration as a means of poverty reduction and economic growth in rural communities led to a substantial influx of registration applications. DSBD (2020) observed that by the 2015/2016 financial year, South Africa had nearly 132,000 registered cooperatives, and the government continued to provide financial and technical assistance to registered agricultural cooperatives as part of its post-apartheid initiatives. The implementation of the formal legislative framework resulted in an immediate and notable increase in the formation of black-owned cooperatives, as depicted in Figure 1.2. This surge indicates a positive outcome of the legal measures put in place to support and promote cooperatives in South Africa.



**Figure 1.2. Trend in numbers of cooperatives in South Africa. (Source: DAFF, 2018)**

The Department of Agriculture, Forestry and Fisheries (DAFF, 2018) reports a notable surge in the development of cooperatives in South Africa, as evidenced by Figure 1.2, which displays a substantial increase in the number of registered cooperatives since 2005. While there has been a moderate growth in cooperative registrations nationwide, Fernandez-Guadaño, Lopez-Millan and Sarria-Pedroza (2020) argue that these cooperatives have had limited impact on local economic development and have not significantly improved the living standards of rural communities. In light of this, the present study aimed to investigate the influence of agricultural cooperatives on the sustainability of rural livelihoods and identify effective strategies to enhance the well-being of rural communities.

### **1.3 Statement of the Problem**

The effectiveness of agricultural cooperatives in promoting sustainable rural livelihoods is a complex issue that requires thorough exploration. Sustainability in rural livelihoods is intrinsically linked to the ability of households to maintain stable incomes, achieve food security, and enhance their overall quality of life while responsibly utilising environmental resources (Nyawo, 2023; Musumba, Palm, Komarek, Mutuo & Kaya, 2022). Cooperatives can play a significant role in fostering sustainability by improving access to training, technology, and sustainable farming practices. In KwaZulu-Natal, where rural poverty rates remain persistently high, cooperatives can mitigate vulnerabilities by offering social support networks and sharing risks among members (Petrushenko et al., 2022). This social capital is crucial for building resilience against economic shocks and environmental changes, such as climate change, which disproportionately affect smallholder farmers (Yang, 2023).

However, the success of agricultural cooperatives is often undermined by internal challenges, including poor governance, lack of financial management skills, and limited capacity to adapt to external shocks. These challenges can hinder the cooperatives' ability to effectively support their members and promote sustainable livelihoods. For instance, studies have shown that many cooperatives in South Africa struggle with operational inefficiencies and governance issues, which can lead to a lack of trust among members and diminished collective action (Lipatova et al., 2021). Furthermore, the fluctuating market conditions and the global economic landscape pose additional challenges that require cooperatives to be agile and responsive (Musumba et al., 2022).

Understanding the interplay between these internal and external factors is crucial for enhancing the effectiveness of agricultural cooperatives in promoting sustainable rural livelihoods. Research

indicates that cooperatives can significantly contribute to socio-economic development by generating income, creating jobs, and empowering marginalised communities, particularly among smallholder farmers (Nyawo, 2023; Frimpong-Manso et al., 2023). By facilitating collective bargaining and improving financial accessibility, cooperatives can help farmers' secure better prices for their produce and access necessary resources, thereby enhancing their livelihoods (Xaba et al., 2018; Moyo & Gasva, 2022). Moreover, the role of agricultural cooperatives extends beyond mere economic benefits; they also foster social cohesion and community development. By providing a platform for farmers to collaborate and share knowledge, cooperatives can enhance social capital, which is vital for building resilient rural communities (Petrushenko et al., 2022; Lipatova et al., 2021). This social capital can manifest in various forms, including mutual support networks, shared learning experiences, and collective problem-solving, all of which contribute to the sustainability of rural livelihoods (Ariyanto, 2023).

Agricultural cooperatives play a vital role in promoting economic empowerment and community development, especially in rural areas (Oluwayemisi, Sunday, Fidelis & Temitayo, 2023). However, much of the existing research focuses narrowly on their short-term economic contributions, often overlooking the broader, long-term impacts these cooperatives have on rural sustainability across economic, social, and environmental dimensions. Previous studies, such as those by Rena (2021) and Zhang et al. (2021), have emphasised small-scale economic benefits but have not fully explored how cooperatives contribute holistically to the sustainability of rural livelihoods. Additionally, research specific to South Africa, particularly in KwaZulu-Natal, remains inconclusive regarding the long-term effects of agricultural cooperatives on rural sustainability.

This research purposes to address these gaps by examining how agricultural cooperatives in KwaZulu-Natal contribute to sustainable rural livelihoods through an integrated focus on economic, social, and environmental sustainability. Notably, existing studies lack comprehensive frameworks that examine these three pillars of sustainability in tandem, particularly in the context of cooperatives (Moralles, Egal & Oldewage-Theron, 2021; Iliopoulos, Värnik, Kiisk, Varthalamis & Sinnott, 2022). By investigating how cooperatives foster rural resilience, inclusive governance, and environmental stewardship, this study seeks to provide a more complete understanding of their role in promoting sustainable rural development.

This study offers a novel contribution by providing a holistic analysis of agricultural cooperatives' impact, moving beyond isolated economic or social benefits. It purposes to integrate the three key pillars of sustainability into a cohesive framework for evaluating cooperative effectiveness, thereby filling a critical gap in the literature. Focusing on the under-researched region of KwaZulu-Natal, the study presents new insights into the long-term sustainability of agricultural cooperatives, bridging the gap between theory and practice and positioning this research as a significant advancement in the field of rural development and sustainability.

#### **1.4 Research Aim**

This research aimed to examine the influence of agricultural cooperatives on the sustainability of rural livelihoods in KwaZulu-Natal, South Africa, by examining their contributions to economic, social, and environmental dimensions of sustainability. The study sought to identify the factors that enhance or hinder cooperative success, providing insights into how these organisations can more effectively support long-term rural development in the region.

#### **1.5 Objectives of the Study**

- i) To establish the influence of agricultural cooperatives on rural livelihoods in respect of environmental sustainability.
- ii) To establish the influence of agricultural cooperatives on rural livelihoods in regards to social sustainability.
- iii) To establish the influence of agricultural cooperatives on rural livelihoods in respect of economic sustainability.
- iv) To identify the challenges faced by agricultural cooperatives in KZN, South Africa, and assess their influence on the sustainability of rural livelihoods.
- v) To provide recommendations for enhancing the agricultural cooperatives on the sustainability of rural livelihoods in KZN.

#### **1.6 Research Questions**

- i) What is the influence of agricultural cooperatives on rural livelihoods in respect of environmental sustainability?
- ii) What is the influence of agricultural cooperatives on rural livelihoods in respect of social sustainability?

- iii) What is the influence of agricultural cooperatives on rural livelihoods in regards to economic sustainability?
- iv) What are the challenges experienced by agricultural cooperatives in KZN, South Africa, and how do these challenges impact the sustainability of rural livelihoods in the region?
- v) What recommendations can be proposed to enhance the agricultural cooperatives on the sustainability of rural livelihoods in KZN, South Africa?

### **1.7 Purpose of the Study**

The main purpose of the research was to explore the influence of agricultural cooperatives on the sustainability of the livelihoods of rural communities in the KZN province of South Africa. The study intended to discover the community solutions offered by agricultural cooperative enterprises towards the sustainable livelihoods of local people. This exploration seeks to bridge the gap between agricultural cooperatives and the broader community, fostering a deeper understanding of the multifaceted role of cooperative enterprises beyond their economic functions. Furthermore, the research aims to provide recommendations that could enhance the impact of agricultural cooperatives on the sustainability of the livelihoods of rural communities (UN, 2015). By exploring this subject, both governmental bodies and the cooperative movement could gain valuable insights into strategies to mitigate South Africa's high cooperative failure rate, which stands at 65 percent (DTI, 2018).

As defined by the International Cooperative Alliance (ICA), cooperatives are independent associations of individuals who come together voluntarily to fulfill shared economic, social, and cultural aspirations. They do so through collectively-owned and democratically-governed enterprises, guided by principles of self-help, accountability, democratic decision-making, equality, fairness, and unity (ICA, 2005:16). This research thus offers an opportunity to harness the full spectrum of benefits associated with the presence of cooperatives within a community.

### **1.8 Study Motivation**

In recent years, the South African government have recognised the significant role of cooperatives in rural development. This recognition is reflected in high-level governmental documents such as the constitution and the "Integrated Strategy on the Development and Promotion of Cooperatives (2012–2022)" (DTI, 2017). The strategy emphasises four pillars of support for cooperatives, including increasing non-financial support services, creating demand for cooperative goods and services, enhancing cooperative sustainability, and providing financial support services (DTI, 2017).

Candemir et al. (2021) highlight the dynamic nature of cooperatives in promoting sustainable rural development and community empowerment. They emphasise the importance of community involvement and the pursuit of diverse economic, social, productive, and ecological goals, rather than focusing solely on short-term interests. Zhang et al. (2021) also note that rural cooperatives facilitate active participation of rural residents in community development. Since gaining independence in 1994, the South African government has been actively supporting cooperative development, particularly among the previously disadvantaged black majority. Substantial resources have been allocated to enhance the viability and competitiveness of cooperatives in the country. For example, the government funded a significant number of cooperatives, providing grants totaling millions of South African Rand (DTI, 2014; DSBD, 2020).

Risal (2020) emphasises the positive impact of improved access to loans, agricultural supplies, and micro-enterprises in enhancing the productivity of farmers and driving local economic development, leading to community growth and poverty alleviation. The pressing crises that South Africa is currently facing, such as floods, pervasive water shortages, the ongoing energy crisis, and serious socioeconomic problems like unemployment, poverty, and income inequality, require long-term solutions. By fostering food security, creating jobs, promoting eco-friendly practices, and bolstering local economies, agricultural cooperatives can mitigate the effects of these challenges and enhance the resilience of rural communities (Kgobe, 2020). Cooperatives can play a crucial role in addressing the socioeconomic and environmental vulnerabilities in the region by supporting community-driven projects and encouraging sustainable agricultural practices (Aryal, Sapkota, Rahut & Jat, 2020). Considering the government's efforts and the positive response from citizens to these policies, the researcher aims to investigate the influence of agricultural cooperatives on the sustainability of rural livelihoods in the KZN province of South Africa. Overall, the South African government's commitment to cooperative development, along with the recognition of cooperatives' potential for rural development, community involvement, and economic growth, sets the stage for exploring the impact of agricultural cooperatives on sustainable livelihoods in the KZN region.

### **1.9 Significance of the Study**

In spite of the growing body of research on cooperatives, only a limited number explore into their contributions within the context of livelihood sustainability (Mhembwe & Dube, 2017; Risal, 2020; Raniga, 2021; Moyo & Gasva, 2022). The findings of this study are anticipated to enrich the existing

knowledge landscape by shedding light on how agricultural cooperatives play a pivotal role in harmonising the multifaceted dimensions of sustainability—economic, environmental, and social. This endeavor is poised to illuminate whether this farming model holds relevance for the sustainable livelihoods of rural communities. Furthermore, the study aims to uncover the challenges faced by agricultural cooperatives in KZN, South Africa, and assess their influence on the sustainability of rural livelihoods, potentially paving the way for enhancing the benefits derived from cooperative ventures. The study introduces the notion of employing an integral approach in dealing with cooperative enterprises, advocating for the active involvement of local stakeholders in pivotal decision-making processes related to cooperatives. In this vein, the government's role should be focused on creating an enabling environment, allowing these grassroots actors to assume a central role in cooperative operations.

The study further illustrated sustainable livelihood processes through empirical evidence that holds policy relevance and offers practical utility to rural communities. Unlike various business and developmental paradigms that primarily center on material-driven economic expansion to tackle challenges like hunger, poverty, inequality, and disease, this study aimed to showcase the applicability and simplicity of a diverse array of cooperatives adopting a sustainomics-compatible approach to address an array of issues and enhance livelihoods. Unlike some alternative business models, which may not equally prioritise all three dimensions of sustainability—social, economic, and environmental—this study provides insight into how cooperatives can comprehensively address these aspects in a balanced manner.

Consequently, it is expected that the findings and recommendations will stimulate further discussions and provide decision-makers with valuable empirical insights into the establishment of thriving cooperative enterprises. The study is poised to offer substantial assistance to the cooperative movement, governmental bodies, the broader public, and the academic community, thereby contributing to a comprehensive understanding of effective cooperative practices.

### **1.10 Methodology Employed in the Study**

The researcher employed a qualitative research design, which aims to explore and understand the meaning and significance individuals or groups attach to social or human events (Vindrola-Padros & Johnson, 2020). Within this qualitative study, an interpretivist philosophy was adopted, recognising the existence of multiple socially constructed realities in the world. By embracing

interpretivism, the researcher acknowledges that individuals attribute meanings and interpretations to social phenomena, and these subjective perspectives shape their understanding and actions. The focus of the study was to understand the diverse interpretations and meanings attributed by social actors to the phenomenon under investigation, capturing perspectives and experiences.

To investigate the influence of agricultural cooperatives on the sustainability of rural livelihoods in KZN province, an inductive approach was adopted. The inductive approach facilitates the study by allowing the exploration of patterns and themes emerging from data, leading to theory development (Rahman, 2020). This approach is particularly effective in understanding complex, context-specific phenomena like rural livelihoods. Additionally, the inductive approach aligned with the interpretivist philosophical perspective of the study (Taherdoost, 2022b). Through this inductive technique, the researcher addressed gaps in understanding the relationship between agricultural cooperatives and sustainable livelihoods, establishing the study's framework.

The study employed an exploratory analysis to investigate how agricultural cooperatives influence rural livelihoods, utilising non-numerical data collection and analysis methods to ensure the reliability of the findings (Risal, 2020). The foundational assumptions of phenomenological studies were adopted based on the study's objectives and research questions, considering various qualitative research methodologies. A phenomenological research strategy was deemed appropriate to gain a comprehensive understanding of this influence, further supported by employing a multi-methods qualitative approach for data collection.

Data were collected through semi-structured interviews with open-ended questions, focus groups, and analysis of secondary data sources such as annual reports and policy statements. The target population for the study consisted of the board of directors of agricultural cooperatives in the KZN province, totaling 1877 individuals. Non-probability purposive sampling was used to ensure that participants could be easily reached and that the study's objectives would be met. Participants were selected from all levels of the cooperative organisations to capture different points of view, thoughts, and situations, allowing for rich and diverse data to be obtained. The data from interviews and focus group discussions were analysed using thematic analysis with the assistance of NVIVO version 14 software. Ethical considerations were followed, including obtaining informed consent from participants, ensuring no harm would come to them, maintaining confidentiality and anonymity, and securing proper permissions to conduct the study, as per the UKZN Research Committee's guidelines.

### **1.11 Definition of Key Terms**

This section establishes clarity and precision by defining key terms integral to the context of the study. By articulating specific meanings for essential concepts, the study not only enhances understanding within its scope but also fosters coherence and consistency in discussions. These definitions provided below serve as foundational pillars upon which the entirety of the research framework rests. In this section, two definitions are provided for each key term: the first is based on existing literature, while the second is an operational definition specific to how the term is applied in this study.

#### **Cooperative:**

“An autonomous association of persons united voluntarily to meet their common economic and social needs and aspirations through a jointly owned and democratically controlled enterprise, organised and operated on cooperative principles” (SA Cooperative Act 14, 2005: 10).

**Operational definition:** An entity of mutual-based individuals who democratically manage their varied capital and membership enterprises.

**Agricultural cooperatives** are defined as “a cooperative that produces, processes or markets agricultural products and supplies agricultural inputs and services to its members” (SA Cooperative Act 14, 2005: 10).

**Operational definition:** Agricultural cooperatives are entities created voluntarily by members to produce and distribute goods and services, sharing benefits and risks.

**Livelihood** refers to the means used by people in obtaining the basic needs such as shelter, water, food, clothing and medicines (Nunan, 2022).

**Operational definition:** A collective of various activities that involves basic human needs and also the ability to acquire such necessities through possible means either as an individual or as a group for sustainable basis with dignity.

**Sustainable livelihood** is when assets and capabilities are not undermining natural resources base for now and the future whilst coping and recovery from the shock and stress (Deng, Li & Zhang, 2020).

**Operational definition:** A concept which endeavours to touch beyond the conventional explanations and approaches to eradication of poverty.

**Sustainability** refers to a concept which involves that something be conserved at its current status for example, economic well-being or environment quality (Eggert & Hartmann, 2023).

**Operational definition:** The multi-dimensional in nature where three independent but necessary pillars define it and these are economic, environmental and social.

**Sustainable agriculture** means a practise in which agriculture does not compromise the ability of both the present and future generations to be able to meet their human needs (Qaim, 2020).

**Operational definition:** Farming in a way that enables to meet the society's present food needs and not destroying the future.

## **1.12 Overview of the Thesis**

The thesis's structure depicts the flow of each chapter and provides a brief summary of each chapter's main points. The following is how the thesis is organised:

### **Chapter 1: Study Background and Overview**

The first chapter introduces the study and covers the study's background, the research problem, the study's goal, the research objectives, the research questions, and the study's relevance and thesis structure.

### **Chapter 2: Development of Cooperatives and the Legal Framework**

The history of cooperatives, the evolution of agricultural cooperatives in developed and developing nations, the expansion of agricultural cooperatives in South Africa, and international best practice were all covered in this chapter.

### **Chapter 3: Theoretical and Conceptual Framework**

This chapter introduces the conceptual and theoretical frameworks that guide the research, along with a review of relevant literature. The sustainable livelihood framework is discussed in depth, highlighting its connection to the research topic. Perspectives from the conceptual and theoretical domains provide insight and understanding in the research field.

### **Chapter 4: Research Methodology**

This chapter provides an overview of all the components and features of the research employed in this study. It addresses data collection, processing, and analytic techniques, as well as research methodologies, research philosophies, instruments, and sampling strategies. Qualitative methodology was used. This chapter goes into the interviews and focus group discussions, the data collection processes and the tools utilised for analysis in greater depth.

### **Chapter 5: Presentation, Analysis, and Interpretation of Interviews and Focus Group Data**

In this chapter, the qualitative findings from both the interviews and focus group discussions are presented, analysed, and interpreted. The primary data collected through semi-structured interviews is thoroughly examined alongside supplementary research and literature. The analysis aims to address the key issues outlined in Chapter 1. Additionally, focus group data is used to validate the findings from the interviews, providing further insights and strengthening the reliability of the study's conclusions. Interpretations are supported by relevant literature to ensure a comprehensive understanding of the topics under investigation.

### **Chapter 6: Conclusions and Recommendations**

The research report ends with this chapter. A number of recommendations are provided for further investigation or practical use. These emerged from the findings presented in chapters five and six, and also from the theory discussed in chapters two and three.

#### **1.13 Chapter Summary**

This chapter included the background of the study, the statement of the problem, the research objectives, and the research questions. It provides background information about the topic being studied and addresses key points such the study's aim, and overview of the thesis. The next chapter will examine the pertinent literature and examine the evolution of cooperatives historically as well as the laws that govern them. The study progresses by providing theoretical foundations and empirical evidence to support the investigation of cooperative business model.

## **CHAPTER 2: THE DEVELOPMENT OF COOPERATIVES AND THEIR LEGAL FRAMEWORK**

### **2.1 Introduction**

This literature review aims to provide a comprehensive understanding of the development of cooperatives and their legal framework, offering direction and a strong foundation for this research. The expansion of cooperatives worldwide has significantly influenced the rise of collaboration among members, leading to the growth of cooperative movements. The review begins by exploring the fundamental concept and principles of cooperatives, followed by an examination of the various forms they can take. It then examines into the historical evolution of the cooperative movement, offering context for its current structure. The discussion extends to the management of cooperatives, highlighting the factors that influence governance and how these elements contribute to their effectiveness. Additionally, the review considers the potential benefits that cooperatives bring to their members and communities, especially in rural settings. Finally, the challenges faced by agricultural cooperatives are addressed, underscoring their importance to the sustainability of rural livelihoods and the need for effective strategies to overcome these obstacles.

### **2.2 The Concept of Cooperatives**

The International Cooperative Alliance (ICA) defines a cooperative as “an autonomous association of persons united voluntarily to meet their common social, economic and cultural needs as well as their aspirations through a jointly owned and democratically controlled enterprise” (ICA, 2005: n.p; DTI, 2014: 7). Serra and Davidson (2021) define a cooperative society is an organisation of group of people with collective responsibilities and thoughts for the development of needy, especially under privileged. Taking from the above definitions, it can be summarised as an entity of mutual-based individuals who democratically manage their varied capital and membership enterprises. The cooperatives have the interests of members and community to defend and it is different from a socio-professional body whose actives are just like a pressure group. Risal (2020) opine that the mutual commitment of each member involved is a necessary feature of a cooperative. It is the responsibility of every member to collectively engage in economic benefits enterprising activities whilst they preserving the autonomy of the cooperative.

Given the above information, the ICA cooperative definition is being adopted to assume that cooperatives are independently owned businesses by members as workers, producers and consumers, that they designed to meet the needs of its members, they are democratically controlled and capitalised by membership which is open and voluntary organised. The cooperatives also assumed

to return a portion of net earnings to members based on the extent to which they patronise the cooperative (ICA, 2007; Shangase, 2022).

**2.3 Design of the Cooperative Institutional Model**

According to Taylor (2015), cooperatives are organised as representative networks of enterprises and electoral associations, functioning as miniature democracies within larger society. They prioritise the principles of self-help, self-reliance, democracy, equality, equity, and solidarity. Papilaya et al. (2021) argue that unlike investor-owned companies, cooperative governance is based on an egalitarian one-member, one-vote rule, ensuring inclusivity and avoiding exclusion of stakeholder classes. The cooperative structure and design evolve through experimentation and are influenced by societal norms, the industrial context, and legal regulations (ICA, 2005). These emergent properties reflect the socially constructed patterns of cultural symbols and practices that shape the daily activities and experiences of individuals and organisations within cooperatives. The Figure 2.1 below illustrate the general structure of cooperative enterprise.

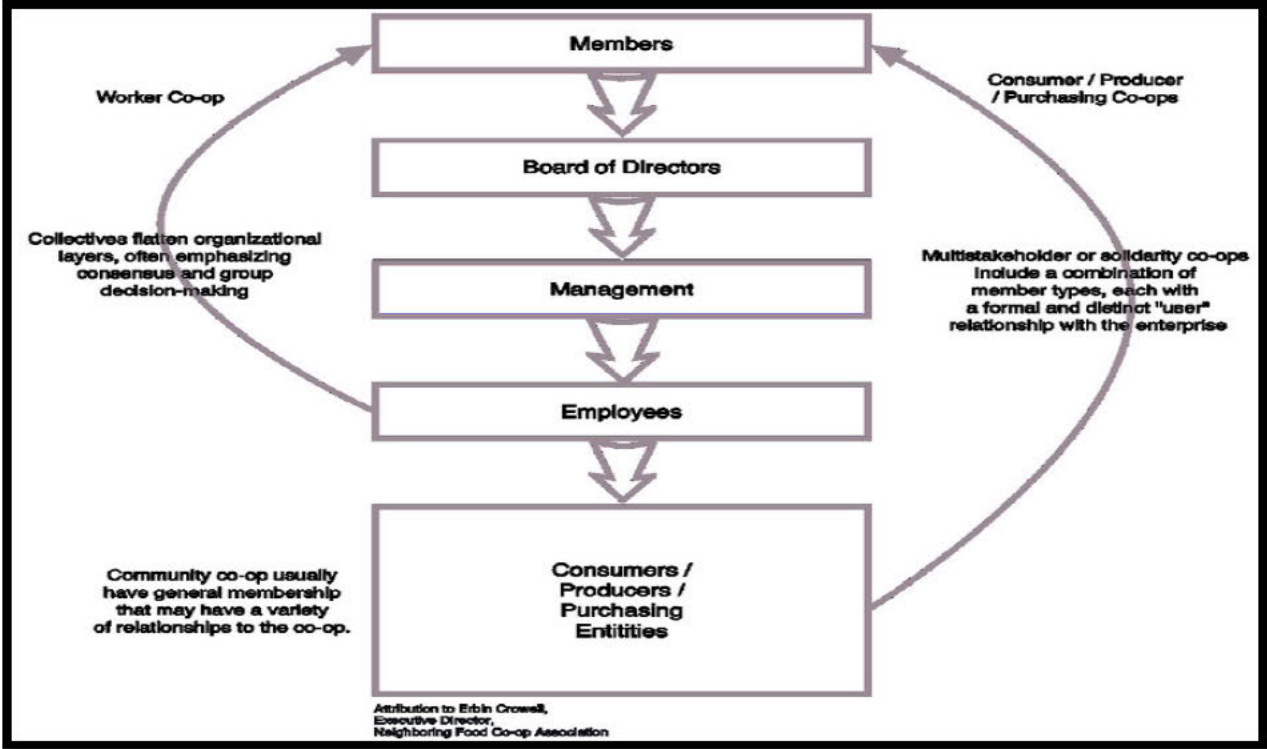


Figure 2.1. General structure of cooperative enterprise (Source: Taylor, 2015:154).

Today, cooperatives are commonly defined as “an autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly owned and democratically controlled enterprise” (SA Cooperative Act 14, 2005: 10). This

definition applies to all cooperatives regardless of type, community or membership size or geography. Although there may be a number of challenges faced by the collective operation but cooperatives may be a tool to initiate the development in rural areas (Christian, Obi, Zantsi, Mdoda & Jiba, 2024).

#### **2.4 Defining Characteristics of Cooperatives**

A cooperative is essentially a user-owned and user-controlled enterprise that distributes advantages fairly based on usage or patronage (Sahoo et al., 2020). A farmer member would thus be entitled to 5% of the net profits made from the handling, processing, and selling of corn or related goods if they account for 5% of the volume of corn provided to the cooperative. According to the National Council of Farmer Cooperatives (NCFC) (2005), "such patronage payouts help enhance the revenue of farmers either directly or by reducing the effective cost of the goods and services offered". This concept is also known as "business-at-cost". Shangase (2022) further emphasised the distinctive characteristics of cooperatives in contrast to conventional (investor-oriented) firms are:

- i) Rather than being owned by outside investors, cooperatives are democratically controlled and owned by the members who use their services or purchase their products. The board of directors is chosen by the members. Regardless of how much each member has invested in the cooperative, most policy decisions are based on the one-member, one-vote basis.
- ii) Members receive a share of the cooperative's surplus income (revenue after expenses and investments), not a share based on how much they invested or owned the business.
- iii) Cooperatives only exist to benefit its members.
- iv) Income held by cooperatives for investments and reserves is taxed. According to patronage, extra money is given back to specific members who have already paid taxes on it.
- v) Cooperatives are driven to fulfil members' needs for reasonably priced, high-quality goods and services, not for financial gain.

Shangase (2022) concurs with these viewpoints and states the following about the fundamental traits of cooperatives: cooperatives are private organisations, and public policy establishes the institutional framework. Their primary goal is to provide economic benefits for members; members are typically patrons; members own and control the cooperative; qualified patrons receive distribution of benefits according to patronage; and cooperatives are private organisations. The Rochdale, traditional, proportionate, contemporary, and ICA principles are seven sets of cooperative principles that have developed over time. According to Kalogiannidis (2020), current agricultural practise is most closely aligned with the traditional and modern principles.

## 2.5 Cooperatives Principles

A first modern cooperative started in 1844 by the 28 unemployed members of a community in England, they pooled together their merger resources to form a cooperative in attempting to improve their livelihoods (Van der Walt, 2005; Christian, Hans & Gidi, 2018). The group developed guiding cooperatives principles which are currently used universal in the cooperative movement. This first modern cooperative was founded on the principles of equity, equality and mutual self-help (Christian et al., 2024). In 1963 at the annual conference of the ICA, the group's three principles were adopted and modified to govern all cooperatives worldwide (Jones, 2023). For a cooperative to live and being viable, it has to operate within several values and seven principles (Francesconi & Wouterse, 2021). The ICA which is a board that governs cooperatives globally, had then agreed on seven principles of cooperatives which are; democratic member control, open and voluntary memberships, economic member participation, autonomy and independence, concern for the community and education, training and information (ICA, 2005).



Figure 2.2. Seven cooperative principles (Source: Birchall, 2014:13)

### 2.5.1 Open and Voluntary Membership

One of the first principles of the cooperative is open and voluntary membership. This principle emphasising that cooperative do not discriminate members in any form. People should not be affected on their membership on the basis of gender, religion, social, racial or even political

inclination. According to this principle, a cooperative accepts every person who intends to benefit from the opportunities and services of the cooperatives. Francesconi and Wouterse (2021) assert to this principle adding that the cooperatives have to understand its capacity and have a predetermined total member to guide its memberships.

### **2.5.2 Democratic Member Control**

The principle of democratic member control simply gives the members the power to actively control the organisation democratically through formulation of policies and making decisions. As such, the management of the cooperatives should be elected and accountable to its members. Sahoo et al. (2020) argue that the exercising of equal voting right by all members of a primary cooperative where 'one member one vote' rule applied is the only way the principle can be noticed. It is pertinent to democratically manage the cooperatives.

### **2.5.3 Economic Member Participation**

Economic member participation is anchored on the view that members are the owners of the cooperatives should equitably contribute towards the growth of the society (ICA, 2005). The nature and sector of the cooperative will determine the kind of contributions from the members. Jones (2023) suggests that the participation could be in various forms including share buying, manual labour for agricultural cooperatives and even delivering farm produce to the cooperative owned processing plant.

### **2.5.4 Independent and Autonomy**

Cooperatives are independent and autonomy enterprises. The cooperatives should be free from external forces such as development agencies, government and non-governmental organisations (NGOs) (Serra & Davidson, 2021). Their strength should be engraved on the value of self-help and self-reliance with the view of controlled by members (Rapando, Mutukaa & Wamalwa, 2021). Thus, any agreement with other organisations or persons should not affect the autonomy and independence of the society.

### **2.5.5 Education, Training and Information**

Education, training and information, as noted by Rapando, Mutukaa and Wamalwa (2021) it encourages and empowers cooperative members to actively participate in decision making of the organisation. It has to train and educate the cooperative employees too on best ways of doing business. Furthermore, Darma, Wijaya and Darma (2020) note that the cooperatives should be committed to educate the public about the benefits, nature and working of the cooperatives to ensure the public really understand the concept of cooperation.

### **2.5.6 Cooperation among Cooperatives**

Cooperation among cooperatives is another critical principle that promotes unity among the cooperatives. Through working together from the local, national, regional and even up to the international structures, this will strengthen the cooperative movement to serve their members most effectively (Serra & Davidson, 2021). The ICA (2005) noted that cooperatives need to serve interest of their members always. However, there is need to strengthening the cooperative movement structures from the local, national, regional and international for it to be more effective. Therefore, circulation of business opportunities and income among the cooperatives will improve as a result of this cooperation.

### **2.5.7 Concern for Community**

The cooperative is an economic model which is rooted in the grassroots therefore the principle of concern for community is important (Sahoo et al., 2020). The cooperatives are working for the sustainable development of communities through focusing on members' wishes and needs.

## **2.6 Forms of Cooperatives**

Cooperatives are often classified in one of two ways: by their ownership structure or by the goods and services they supply (Tshishonga, 2020). Cooperatives are divided into two groups based on their ownership structure: worker-owned cooperatives and client-owned cooperatives (Schwettmann, 2022). Consumers, producers, and workers are the stakeholders of a cooperative enterprise. Rapando et al. (2021) discussed various categories of cooperatives and can be classified into six types: producers, consumer, marketing and supply, housing, financial services and agricultural cooperatives. In the paragraphs that follow, each type of cooperative will be briefly discussed.

### **2.6.1 Producer Cooperative**

A producer cooperative is a type of cooperative that is owned by a collection of people who all produce similar type of commodities (Jackall & Levin, 2021). The memberships of this type of cooperative process and distribute their goods using shared facilities. Billiet, Dufays, Friedel and Staessens (2021) allude that producer cooperatives, sometimes known as marketing cooperatives, provide members with value-added services such as branding, processing, and packaging. Producer cooperative members have access to services and products that would be prohibitively costly if purchased individually. Cooperatives of this type are widespread in the agriculture business, where they provide members with value-added services (Debisa, 2023; Kayongo et al., 2022). Corn growers, for example, could organise a cooperative to own and manage a flour mill. Members of the cooperative who are also independent farmers may be eligible to employ the cooperative's branding

services (Jackall & Levin, 2021). This allows them to tap into wider markets while also lowering transaction costs. Producer cooperatives reduce input costs while also increasing farmers' bargaining power, perhaps resulting in greater returns on the investment.

### **2.6.2 Consumer Cooperative**

This cooperative is owned by individuals who buy consumable goods on a regular basis. Cooperatives like these buy in bulk and pass the savings on to its members (Rapando et al., 2021). Consumer cooperatives include supermarkets, grocery shops, and retail outlets that offer a range of items to members at lower prices. The creation of this type of cooperative is motivated by an aspiration to disrupt the cartel of the market by giving customers with rival supply chains. Consumer cooperatives are owned and governed by people who want to buy goods and services from them that are not available from other firms or are offered at higher costs by other businesses (Tshishonga, 2020).

In the United States, for example, these cooperatives have been hailed as a fresh source of hope for a generation of Americans wishing for a more equitable distribution of the country's resources (Okem, 2016). Cooperatives were commonly used as a representation of resistance to hierarchical, technocracy companies, and "big business as usual." William King (1786–1965) fought for and popularised consumer cooperatives. Through his periodical, "The Cooperator," he popularised the concept of consumer cooperatives, resulting in a fast growth of consumer cooperatives (Tshishonga, 2020). Patronage refunds, which are earnings returned to members based on how much they purchased from the cooperative, are common in consumer cooperatives, as they are in other cooperatives. It is worth noting, though, that some consumer cooperatives do not keep close enough account of purchases to issue patronage refunds or donate annual surpluses to community organisations designated by members or their elected leaders.

### **2.6.3 Marketing and Supply Cooperatives**

The South African Cooperative Act No 14 of 2005 defines marketing and supply cooperatives are those societies that engages in supply of production inputs to members and markets or processes their products, and also includes an agricultural marketing and supply cooperative. Marketing and supply cooperatives are organisations formed by a group of individual businesses or producers who come together to collectively market and sell their products or services. Atmadja, Saputra, Tama and Paranoan (2021) assert that these cooperatives are typically formed in industries where individual businesses may face challenges in marketing and distribution due to their small size or limited resources. The primary goal of marketing cooperatives is to enhance the market power of their

member businesses by pooling resources, coordinating efforts, and leveraging economies of scale. By working together, these cooperatives can access larger markets, negotiate better terms with buyers, and benefit from cost savings in areas such as advertising, packaging, transportation, and distribution (Debisa, 2023).

It is worth noting that marketing and supply cooperatives can take various forms, such as agricultural cooperatives, producer cooperatives, or consumer cooperatives, depending on the nature of the industry and the participants involved (Chiwawa, Chivasa & Wissink, 2021). The specific structure, governance, and activities of a marketing cooperative will vary based on the needs and goals of its members.

#### **2.6.4 Housing Cooperatives**

These cooperative housing societies are designed to give their members access to residential housing on an ownership basis or through rental agreements. According to Ferreri and Vidal (2022), they offer a variety of models for collective ownership of housing stock and are a part of a larger group of "social housing" efforts that also include self-build plans based on cooperative or group building methods. Housing societies are groups of people who plan to construct their own homes. These organisations provide loans to members that must be repaid over a 15- to 20-year period (Barenstein et al., 2022). On the other side, housing building societies develop homes for their members as opposed to giving them loans. These are organisations that purchase property, build houses, and rent them to members (Abera, Haji, Legesse & Sassi, 2021). However, after paying the price, the member-tenant can purchase the homes.

Barenstein et al. (2022) claim that, the necessity for housing cooperatives arose from the realisation that the majority of housing issues in developing nations can only be resolved within the context of thriving, integrated, and self-managed communities. Governments in numerous nations frequently enforce what they believe to be solutions to citizens' housing concerns without first ascertaining whether or not the solutions are what the citizens actually want.

#### **2.6.5 Financial Services Cooperatives**

The South African Cooperative Act No 14 of 2005 defines financial services cooperative as those whose main objective is to provide financial services to its members, and includes a savings and credit cooperative, cooperative banks, credit union, or other financial services. Members own financial cooperatives, much like other forms of cooperatives. Members' funds serve as a reserve for financial cooperatives, which they utilise to lend to both members and non-members (Kayongongo et al., 2022). Because they do not put the same limits on developing cooperatives as commercial

financial institutions, cooperative financial institutions (CFIs) are preferable providers of finance for cooperatives.

CFIs have been demonstrated to be resilient during economic downturns in studies (Mohlala, 2020; Chiwawa et al., 2021). CFIs are known for their dedication to promote the needs of their members. Chiwawa et al. (2021) argue that, the resilience of cooperative financial institutions is connected to their values of care for both members and the community at large. Cooperatives are motivated by their beliefs to practice banking in a way that does not put members' money at danger. Despite the detrimental consequences of the 2008 financial crisis on CFIs, they outperformed other types of financial institutions (Ferreri & Vidal, 2022). Most financial cooperatives have weathered the financial crisis without the need for government grants and also without stopping to lend to people and groups." In the same way, ICA (2010) concluded that, "cooperative banks [since the 2008 recession] have given millions of people stability and financial security because the cooperative banking business model emphasises not profit maximisation but rather the best possible products and services to members." Moreover, Singh, Misra, Kumar and Tiwari (2019: 13), allude that cooperative banks "demonstrate that there is an alternative to the current strategy of more public control of commercial banks, while still offering banking and insurance to low-income people who would otherwise be unbanked" in many countries. Despite their financial difficulties, cooperatives have been successful in providing financial services to their members.

#### **2.6.6 Agricultural Cooperatives**

Agricultural cooperatives are economic units created voluntarily by members to produce and distribute goods and services, sharing benefits and risks (Prieto et al., 2020). They are defined as organisations that engage in the production, processing, marketing, and supply of agricultural products and services to their members (DAFF, 2015). These cooperatives serve as service centers in rural areas, pooling resources and maximising the benefits of members through entrepreneurship (Awoke, 2021). They function as distributors of farming inputs, providers of farm credit, processors, marketers, and engage in various economic activities for the benefit of society and members (Mundia, Nkonde, Simui & Imasiku, 2022). Agricultural cooperatives can be categorised as either production cooperatives, where farmers jointly operate the cooperative on shared agricultural plots, or service cooperatives, where members carry out independent activities while the cooperative provides various services (DAFF, 2015).

Agricultural cooperatives have the potential to empower marginalised farmers, reduce poverty, and promote rural and national development (UN, 2017). By pooling local resources and fostering self-help capacity, cooperatives contribute to the economic empowerment of rural communities. Mundia et al. (2022) argue that agricultural cooperatives play a crucial role in transferring agricultural information, providing farmers with lower-cost goods and services, and enabling access to higher-priced markets. Prieto et al. (2020) assert that agricultural cooperatives also facilitate the adoption of modern farming technology and machinery, leading to increased productivity. Through collective action and economies of scale, rural cooperatives offer members enhanced benefits and serve as effective drivers of economic development, guided by principles beyond profit alone.

**Table 2.1: Summary of the forms of cooperatives**

<b>Cooperative</b>	<b>Function</b>
Producer cooperative	Main function of a producer cooperative is to facilitate the collective production and marketing of goods or services by its member-producers.
Consumer cooperative	Main function of a consumer cooperative is to provide goods or services to its member-consumers at fair prices, ensuring their needs are met in a cooperative and democratic manner.
Marketing and supply cooperatives	Main function of marketing and supply cooperatives is to collectively market and distribute agricultural or other products and to provide members with necessary inputs and services. These cooperatives help members access markets, negotiate better prices, and reduce costs by pooling resources and leveraging economies of scale.
Housing cooperatives	Main function of housing cooperatives is to provide affordable housing options to their members by collectively owning and managing residential properties.
Financial services cooperatives	Main function of financial services cooperatives is to provide financial products and services to their member-owners, such as banking, credit, insurance, and investment services.
Agricultural cooperatives	Main function of agricultural cooperatives is to collectively produce, market and sell agricultural products produced by their member-farmers.

**Source: Author's own creation (2023)**

## **2.7 The History of the Cooperative Movement**

Cooperatives have a long history dating back to the 18th century in Europe. The earliest recorded instances of cooperatives can be traced to France's cheese production cooperatives in the region of Franche-Comte in 1750 (Ortmann & King, 2006). Zhang et al. (2021) assert that cooperatives emerged as social and economic alternatives during the industrial revolution in Europe, aiming to address the social and economic challenges of that time. Notable examples include the Shore Porters Society established in Aberdeen in 1498 and the Fenwick Weavers Society in Scotland in 1761 (Okem & Stanton, 2016). Christian et al. (2018) suggest that the Rochdale Society of Equitable Pioneers, formed in 1844, is often regarded as the precursor to modern cooperatives. These cooperatives were established to improve people's livelihoods through collective efforts in response to the socio-economic conditions created by the industrial revolution.

However, during the industrial revolution, both skilled artisans and unskilled workers lost their employment as manufacturing became increasingly automated. Malomane (2019) argues that, the concentration of wealth in the hands of a few industrialists exacerbated the predicament of many smallholder farmers and craftsmen who were unable to compete throughout the industrial age. These individuals lacked organisations to protect them from the capitalist system's exploitation. These, among other things, were the "macro level variables" that triggered widespread proletarianisation in both rural and urban areas across Europe during the 19th and early 20th centuries (Christian et al., 2024). In this context, it has been suggested that cooperatives arose as a shared response by the impoverished to adapt to and mitigate the industrial revolution's imperatives (ICA, 2010). Cooperative members took advantage of scale economics by pooling their resources.

According to Khan (2023), cooperatives were established in response to the disadvantages faced by small-scale producers and the impact of industrialisation on factory workers. These economic organisations were seen as the means to protect the collective interests of the poor and vulnerable, offering an alternative to capitalist exploitation. In the seminal work of Ajayi (2012), Robert Owen considered a visionary thinker, played a significant role in promoting cooperative development with his ideas of creating a more equal society. The Rochdale Society, starting with small consumer stores, expanded into various sectors such as housing, finance, and agriculture (Carletti, 2019). Zantsi (2021) argues that, cooperatives have been instrumental in improving the socio-economic status of people worldwide since their emergence in the late 19th century. Therefore, cooperatives have played

an essential part in taming the socio-economic position of people all over the world since their inception.

### 2.7.1 Cooperative Development in Developed Countries

The history and growth of cooperatives in industrialised nations have been discussed by numerous authors (Cropp, 2002; DTI, 2003; Ortmann & King, 2006). For instance, Ortmann and King (2006) gave a helpful summary of the earliest recognised origins of cooperative concepts and how they are applied to commercial pursuits. The oldest cooperatives in a few different nations are included in Table 2.2.

**Table 2.2: First cooperatives ever registered in a few different nations**

Period	Country	Type of cooperative
1696	Britain	Fire insurance
1752	USA	Fire insurance
1816	Poland	Agriculture
1842	Spain	Consumer
1848	Belgium	Bakery
1849	Germany	Credit
1850	Sweden	Consumer
1851	Norway	Consumer
1853	Italy	Cattle insurance
1863	Bulgaria	Credit
1866	Denmark	Consumer
1876	Netherlands	Consumer

**Source: Ortmann and King (2006:13)**

In the mid-1800s, numerous cooperatives, particularly consumer cooperatives, were established in Europe. However, the founding of the Rochdale Society of Equitable Pioneers in 1844 had a significant impact on shaping the operational principles of agricultural cooperatives (Ortmann & King, 2006). This cooperative, formed in Rochdale, England, by a group of workers, conducted extensive research on cooperatives before developing fundamental operational guidelines. In the seminal work of Ingalsbe and Groves (1989), another important development was the establishment of the first German savings and credit cooperative by Friedrich Wilhelm Raiffeisen in 1864, which laid the foundation for cooperatives in the banking and credit sector. Over time, cooperatives have evolved under the influence of economic conditions, farmer groups, and public policy. Ortmann and

King (2006) argue that in the US, the Capper-Volstead Act of 1922 played a crucial role in facilitating the growth of agricultural cooperatives. Additionally, Cropp (2002) suggests that two prominent schools of thought, the Sapiro monopoly method and the Nourse yardstick approach, emerged during the cooperative growth years of the 1920s and 1930s in the US, shaping the organisational strategy and function of cooperatives. These developments have had a lasting impact on the cooperative movement.

Cropp (2002) gives a thorough review of cooperative growth in the US over a variety of historical periods, including how it has and is now reacting to changes in the political and economic environment. The emergence of new generation cooperatives (NGCs) and the restructuring and consolidation of conventional cooperatives are two trends that have been happening in the structure of agricultural cooperatives in the US since about 1988. (Ortmann & King, 2006). Many classic cooperative traits are still present in NGCs, but they place more of an emphasis on value-added activities. Membership is limited or restricted, and member capital contributions are correlated with product distribution (marketing) rights that are valuable and transferable. These changes imply that cooperative methods are evolving to become more aggressive. According to Cropp (2002), cooperatives in the US have developed into a powerful force in agriculture and are increasingly having an impact on national agricultural policies.

### **2.7.2 Cooperative Development in Developing Countries**

Regardless of their historical and geographical differences, cooperatives in Africa share several essential and distinguishing qualities. Africa's cooperative movement has grown over time. According to Okem and Stanton (2016), the evolution of cooperatives on the African continent may be split into four historical periods: pre-colonial era, colonial era, post-colonial era, and the age of liberal capitalism. This historicity allows for a better understanding of cooperative evolution and how history influences current practices in regard to cooperative growth on the continent. Each era will be presented in the subsections that follow.

#### **2.7.2.1 Cooperatives in Pre-colonial Africa**

Cooperative practices in Africa have roots in pre-colonial times, where the concept of interdependence and collective goals played a significant role. The African communities embraced the idea of collaboration, considering it an integral part of their existence (Okem & Stanton, 2016). Mbiti's dictum "I am because we are" (Mbiti 1969:145) encapsulates the concept of interdependence in African society. As a result, every person sees and experiences himself or herself through the eyes of others; this maxim suggests that collaboration is an inescapable reality in African societies. Rena

(2021) suggests that, while the forms of cooperation varied, communal control of resources like farming land and grazing grounds was common. Some pre-colonial cooperative elements still exist today, such as savings and credit unions, burial societies, and reciprocal work-sharing arrangements for labour-intensive tasks. According to Rapando et al. (2021), these historical practices demonstrate the shared ideals and values underlying cooperatives in Africa.

Despite the ubiquity of colonial-imposed cooperatives in Africa, pre-colonial variations still exist. Traditional saving techniques known as otataje (a local collective saving society) and collective agricultural practices known as 'oluma' are examples of pre-colonial cooperatives among the Idoma of central Nigeria (Ayodele & Arogundade, 2014). 'Oluma' is a traditional practice in which individuals join groups such as clans or age grades and work on each other's fields. Because of this strategy, farmers may own and manage greater farm holdings than they would be able to do individually. In addition to working together on farms, 'oluma' offers a variety of social services to members going through life's ups and downs, such as when a child is born or during funerals (Ortmann & King, 2006). In this approach, 'oluma' aspires to address both the social and economic requirements of its members. This practice was also common in the countries in the Southern Africa including in Zimbabwe and it was known as 'nhimbe'. This illustrates that, while not technically recognised as cooperatives, this traditional practice imbibes ideals similar to those of formally recognised cooperatives.

### **2.7.2.2 Colonial African Cooperatives**

The colonial period overlaps with the second era in the African history of cooperatives. The introduction of modern cooperatives characterised this period. Nyagah (2012) argues that during this time, the growth of colonial powers' economic goals was the driving factor behind cooperatives development, and cooperatives were the exclusive domain of such colonial powers. Cooperatives in Africa during the colonial period were largely designed to produce cash crops for colonial powers' home nations disadvantaging the subsistence crops (Nwafor & van der Westhuizen, 2020). As a result, the structure and type of assistance granted to cooperatives by colonial governments promoted cash crop exports such as coffee, tea, cocoa, and cotton.

Governments actively subsidised white-controlled cooperatives throughout colonial period in Africa (Christian et al., 2024). Cooperatives were given subsidies for two reasons. To begin with, they assured that cooperatives had monopolistic control over the industry in which they traded. Second,

they promoted European settlement in the colonies, thereby reinforcing colonial powers' control over these territories (Carletti, 2019). The British government, for example, encouraged white farmers to form cooperatives in order to produce revenue for colonial administration and to supply raw materials for the colonies' developing industries. In colonial Kenya, cooperatives were established and expanded to benefit European settlers and the United Kingdom (Miroro et al., 2023). Cooperatives were founded only to benefit British settlers and serve the British Crown's economic interests, as the Kenyan example demonstrates.

Christian et al. (2024) suggest that, in practice, the cooperative movement in colonial Africa was not built from the ground up to suit the needs of its members. In view of the foregoing, Frimpong-Manso et al. (2023) observe that cooperatives were not seen as a self-managed socio-economic movement in colonial Africa. In fact, cooperatives sector in general was seen as vehicles for the transmission of government economic and social programs. In a similar spirit, members formed cooperatives because it was a question of public policy rather than personal interest (Nwafor & van der Westhuizen, 2020). Members formed cooperatives to avoid clashes with colonial governments or to obtain access to marketing services of their goods through the sole available channel. They did not regard themselves as the owners of the cooperatives. As a result, the germs of a cooperative society without members were sowed.

Although the preceding presents a comprehensive overview of African cooperatives, it is important to note that the approach towards cooperatives was not consistent. Okem and Stanton (2016) note that the nature and structure of cooperatives varied throughout Africa as a result of the continent's multiple colonial administrations. The diverse colonists' approaches to colonialism altered how cooperatives were advanced. In French colonial areas, for example, the social economic model predominated, whilst the British had a unified method to cooperatives. The previous authors observed that in Portuguese colonies, the producer model was used, but in Belgian colonies, the social movement model was used. Countries such as Ethiopia, Egypt, and South Africa employed an indigenous model when introducing cooperatives.

### **2.7.2.3 Post-colonial African Cooperatives**

After the end of colonialism, Africa entered a new phase of development marked by social and political changes. Mushonga et al. (2019) allude that leaders of newly independent countries saw cooperatives as a means to enhance social cohesion and drive economic progress within their nations.

These leaders considered cooperatives as an extension of the state, similar to the colonial era. Consequently, the organisational structure of cooperatives remained unchanged under the first-generation African leaders (Rena, 2017). During this period, states actively supported the development of cooperatives. However, since cooperatives were seen as state extensions, they were not perceived as independent businesses working towards the collective interests of their members. Instead, they were subject to government control. For instance, in Kenya, the Cooperative Societies Act of 1966 solidified government authority over cooperatives, with financial support and a dedicated department established to supervise their development (Wanyama, Wambugu & Keiyoro, 2021). Tshishonga (2020) observe that agricultural cooperatives received significant attention due to the government's focus on the sector, leading to the implementation of agricultural extension programs.

Wanyama et al. (2021) assert that in postcolonial Africa, cooperatives were often seen as a model for implementing state policies, particularly in local economic development. Julius Nyerere's socialist policies in Tanzania, for example, placed cooperatives under state supervision. Nyerere believed that cooperatives were an appropriate vehicle for his Ujamaa program. Consequently, official support for cooperatives was contingent on their ability to align with the government's vision of change. As a result, cooperatives' autonomy was diminished, and their actions were primarily aimed at fulfilling the government's goals rather than the interests of their members (Nyoro, 2019).

Okem and Stanton (2016) observe that the Ethiopian cooperative movement experienced a similar trajectory as other African countries despite not undergoing institutionalised colonialism. From 1975 to 1991, the military government provided significant institutional support, leading to the growth of cooperatives. However, these cooperatives were not established with the aim of meeting the needs of all members; rather, they were motivated by financial incentives from the government (Schwettmann, 2023). When military control ended and the accompanying financial support ceased, a large number of cooperatives collapsed, indicating that they were not rooted in the principles and values of the cooperative movement.

The concept of change theory is crucial in the domain of development and involves identifying causal pathways to achieve specific outcomes, often emphasising the importance of participation. According to Mushonga et al. (2019) state regulation has hindered the expansion of cooperatives across Africa. The state-led approach to cooperative growth has involved manipulating the

cooperative model, including undermining cooperative autonomy, establishing patronage structures that make cooperatives reliant on the state, lacking democratic member control, and imposing bureaucratic control (Satgar & Williams 2008). These actions contradict the ideals and values of the global cooperative movement.

Rena (2017) suggests that, in post-colonial Africa, cooperatives lacked commitment to principles like member economic participation and communal care. Since cooperatives were seen as extensions of the state, members had little incentive to contribute to their growth and sustainability. The government provided financial support, governance, marketing assistance, and training to cooperatives during this period (Wanyama et al., 2021). However, the heavy reliance on government resources made cooperatives vulnerable to the failure of public institutions, which were often plagued by inefficiency and mismanagement (Mushonga et al., 2019). This highlights the dilemma faced by African cooperatives, while they aim for self-sufficiency, they frequently depend on government support to survive. This dependence necessitates the establishment of state-sponsored cooperative support institutions, blurring the line between state control and official backing.

#### **2.7.2.4 Cooperatives in the Liberal Economic System in Africa**

During the late 1980s to early 1990s, the separation of cooperatives from government entities gained momentum due to the collapse of public institutions and the correlation between government involvement and cooperative failures (Schwettmann, 2023). The belief that cooperatives operate more effectively when independent from the government drove the push for separation. Carletti (2019) argues that this movement reinforced the principles of cooperation rooted in pre-colonial times, where self-help was valued in the absence of formal state support. Over time, cooperatives in Africa transitioned from self-help to state control and, eventually, to state dependency (Schwettmann, 2023). Despite evolving economic and social conditions, the goal of progress remained constant.

William (2003) and Tshishonga (2020) alluded that the push for independent and people-centered cooperatives in post-colonial Africa aligned with the policies of the Bretton Woods Institutions, particularly the Structural Adjustment Programs (SAPs) in the 1990s. These programs promoted a more unrestricted capitalist system with limited government intervention, leading to the privatisation of state-run enterprises, deregulation of sectors, and reduced government involvement (Kayongo et al., 2022). The implementation of neoliberal economic policies through the SAPs resulted in the elimination of subsidies, removal of price controls, and restructuring of the public sector, which

diminished official support for cooperatives. However, this also marked the beginning of Africa's fourth cooperative era, where the state interfered less in cooperative efforts (Sheikh & Wepukhulu, 2019). Rena (2021) further alludes that policies were formulated and implemented to view cooperatives as distinct entities from the government, emphasising members' contributions to cooperative success and promoting professionally managed, autonomous, and self-controlled cooperatives.

Despite the fact that establishing cooperatives autonomous from the state was seen as a positive step in the cooperative movement's development, cooperatives fared badly in many African nations during this time (Nwafor & van der Westhuizen, 2020). Economic liberalisation, for example, had a considerable detrimental influence on cooperatives (Kessy, 2020). This was because the cooperatives had depended heavily on state institutions for many years and were unprepared for the new economic environment ushered in by SAPs. Cooperatives that were unable to continue without the privileges and support they had previously received collapsed as a result of these changes. In East Africa, coffee market liberalisation resulted in global businesses entering the domestic market. Schwettmann (2023) observes that cooperatives' market shares in the coffee industry had been considerably eroded by conglomerates. Despite that, Tshishonga (2020) contend that the SAPs' economic realism was a beneficial development for African cooperatives since it rose in the abolition of unproductive cooperatives that depended only on government grants to survive. It has also led in the formation of new institutional cooperative structures in countries such as Ethiopia and Kenya, which offer market support for local cooperatives (Okem & Stanton, 2016).

Apart from seeking to avoid "wasteful government spending" (one of the SAPs' fundamental beliefs), liberalisation forced cooperatives to adjust to the new economic environment in novel ways (Kessy, 2020). Furthermore, it created a scenario in which the formation of cooperatives was no longer reliant on the availability of government aid in the form of grants and subsidies (Buendía-Martínez, Hidalgo-López & Brat, 2020). According to Debisa (2023), cooperatives, on the other hand were viewed as organisations that promoted the social and economic interests of their members. Moreover, Satgar and Williams (2008) argue that people's excitement for the cooperative movement boosted the development of cooperatives in Africa after the introduction of neoliberal policies. As a result, this period was critical in making sure that cooperatives in Africa embrace the cooperative movement's ideas and objectives. Rena (2021) asserts that following the introduction of SAPs, the government's approach to cooperatives has continued to emphasise the government's relationship

with cooperatives in the entire Africa continent. However, the degree to which cooperatives function without the state intervention varies by country.

## **2.8 The Historical Development of South African Cooperatives**

In this section, a brief historical account of cooperative development in South Africa is presented. The rationale for the direction is to assess whether the cooperative concept is a new phenomenon and how successive South African governments have managed the development of cooperatives.

### **2.8.1 Cooperative Development before Apartheid era**

The concept of cooperatives is not a new phenomenon in South Africa since it was practiced as late as the 1800s (Shoeman, 2006). They were mostly in the form of what is known as ‘stockvels’, which is an informal cooperative practice mainly among black people. The practice has been used for centuries and is still used by the majority of South Africans and Africans in general (Raniga, 2021). People operating ‘stockvels’ come together and collect money periodically. The money collected will then be used for functions, which include family gatherings, funerals, weddings and even birthday celebration parties. Thaba and Mbohwa (2015) assert that these ‘stockvels’ were not registered and were operating informally since the past apartheid laws did not recognise them.

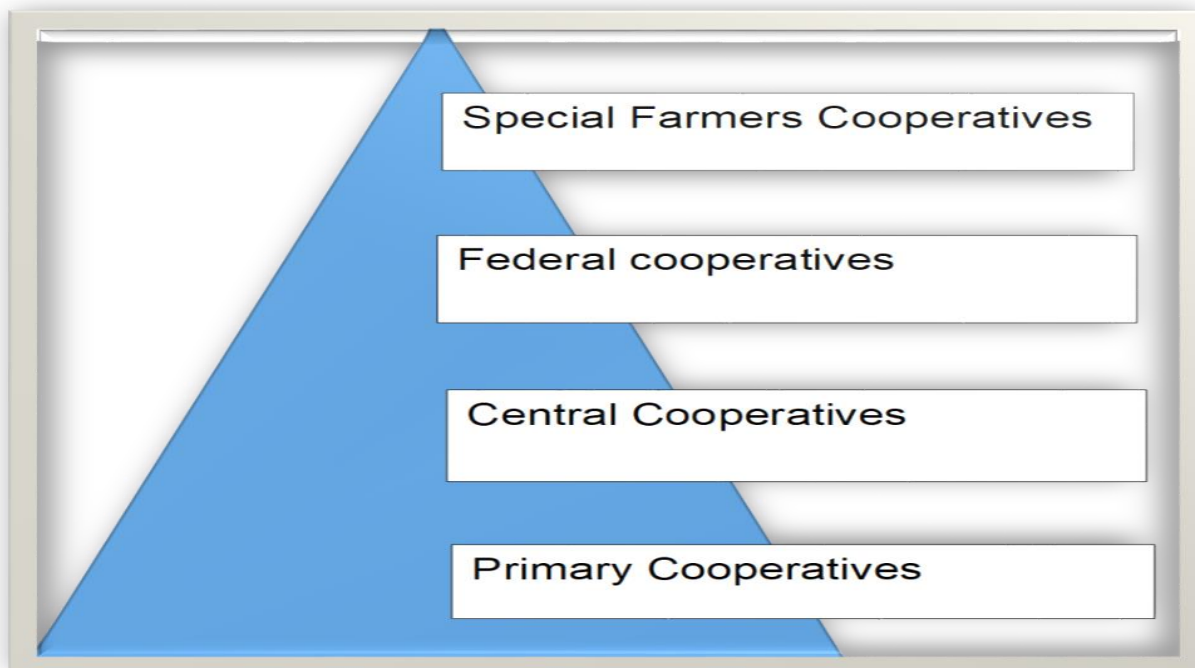
### **2.8.2 Cooperative Development during Apartheid era**

Mushonga et al. (2019) highlight that South Africa has a rich history of cooperative development, with agricultural cooperatives playing a significant role since the early 19th century. Government subsidies and collaborations with agricultural cooperatives fostered a thriving farming society, while consumer cooperatives faced challenges and declined. The Pietermaritzburg consumer cooperative, established in 1892, was the first registered cooperative in the country (Ortmann & King, 2006; Christian et al., 2018). Cooperative legislation, such as the Cooperative Societies Act of 1908 and the Cooperative Society Act of 1922, provided regulatory frameworks for cooperatives. Initially, the focus was on commercial and agricultural cooperatives, supported by favorable agricultural policies from the Department of Agriculture (Malomane, 2019). Exploring the works of various researchers, such as Van Niekerk (1988), RSA (2005), Ortmann and King (2006), Thaba and Mbohwa (2015), and Rena (2017), are crucial for a comprehensive understanding of South Africa's cooperative development background.

Okem (2016) claims that during the colonial and apartheid eras in South Africa, cooperatives were utilised to benefit the white population, particularly in agriculture, while the black African community faced barriers and limited support. Attempts to establish credit cooperatives for African

farmers in the 1930s were hindered by political instability and lack of government backing (Zantsi, 2021b). However, informal financial cooperatives, such as rotating savings and credit associations (ROSCAs) known as ‘stockvels’, emerged among the African community, driven by strong social connections (Van Niekerk, 1988). Despite these grassroots efforts, African-owned projects remained underdeveloped and vulnerable due to opposition from the apartheid regime. The Cooperatives Act of 1981 provided legal recognition for financial cooperatives, but member deposits were not permitted under this Act (Raniga, 2021).

Prior to 1994, the cooperative movement in South Africa followed two distinct trajectories. The first trajectory led to the establishment of powerful white-owned cooperatives, which were closely tied to the state and relied on government support for their success (Mushonga et al., 2019). In contrast, African-owned cooperatives faced suffocation and struggled to thrive, resulting in a predominantly informal economy for black-owned cooperatives (Raniga, 2021). The cooperative business in pre-democratic South Africa did not align with internationally recognised cooperative goals and objectives. Thaba and Mbohwa (2015) claim that many agricultural cooperatives demutualised in the late 1980s and early 1990s due to a lack of official backing and the dominance of marketing boards. The history of cooperative legislation in South Africa includes the Cooperatives Act of 1908, the Cooperatives Act of 1922 focused on agricultural enterprises, a modified Act in 1939, and Act No. 19 of 1981, which introduced provisions for trading cooperatives. During apartheid, only those in the first economy were allowed to register cooperatives, primarily aimed at benefiting the white farming community (DTI, 2010). According to Chibanda et al. (2009), black Africans were only allowed to work as labourers within cooperatives because of prior laws' inequities. The structure of the South African cooperative movement under the Cooperatives Act No. 19 of 1981 is illustrated in Figure 2.3.



**Figure 2.3. Structure of cooperative movement under the Cooperatives Act No 19, of 1981 (Source: Van Niekerk, 1988: 90)**

DTI (2004) claimed that the implementation of the Cooperatives Act, No. 19 of 1981, in South Africa led to the formation of a robust cooperative movement among white South Africans. The Act provided clear provisions for the establishment and regulation of cooperatives, including the role of the registrar's office in overseeing their incorporation, management, financial aspects, and other legal requirements. By 1985, cooperatives in South Africa were categorised into primary cooperatives, central cooperatives, federal cooperatives, and special farmers' cooperatives (Van Niekerk, 1988). Primary cooperatives consisted of farmers engaged in production, collection, processing, and marketing at the farm level, while central cooperatives were formed by two or more primary cooperatives to handle functions such as processing, marketing, purchasing, manufacturing, or distribution. Raniga (2021) found that two federal cooperatives were established to coordinate and strengthen the activities of the central cooperatives.

According to Van Niekerk (1988), this well-equipped, sturdy structure allowed cooperatives to enjoy monopoly in South Africa. Special farmers' cooperatives had special membership, where some members were permitted to conduct business with non-members. Therefore, the movement for agricultural cooperatives' overall goal was to improve the material well-being of white farmers in

South Africa, and its primary goal was to eliminate or significantly reduce any forms of competition that put farmers in danger. Thaba and Mbohwa (2015) note that this was accomplished by encouraging agricultural cooperative members to exchange their production inputs and output marketing. Table 2.3 indicates that prior to gaining independence, four Cooperative Acts were in effect in South Africa.

### **2.8.3 Cooperative Development after Independence**

In 1994, when the South African democratic government came to power, it disregarded the Cooperative Act of 1981 as it was unsuitable instrument for the cooperative development (DTI, 2004). It was lacking adequate cooperative definition, presumption that the government play a strong interfering or paternalistic part was supposed to be corrected and basically the provisions protecting interests of members to be clearly articulated. Thaba and Mbohwa (2015:966) cited the former President Thabo Mbeki in 1999 saying “The Government will place more emphasis on the development of a cooperative movement to combine the financial, labour and other resources among the masses of the people, rebuild our communities and engage the people in their own development through sustainable economic activity.”

As a result, the government started working on a new Cooperative Act based on ICA principles. This process began in 2000, when a draft Bill was released for public comment, followed by a revised draft in 2003 (DTI, 2004). Feedback was received from a wide range of organisations, interest groups, and individuals. As a result of the amended Bill, the Cooperatives Act, 2005 (No.14 of 2005) was published in the Government Gazette on August 18, 2005 (RSA, 2005). Rogan and Alfes (2020) assert that a new Cooperative Act of 2005 was developed in line with the international cooperatives principles. Primary cooperatives (which includes agricultural, housing, consumer, worker, burial society, service and financial cooperatives), secondary cooperatives (founded by two or more primary cooperatives to provide members with sectoral services), and tertiary cooperatives (created by two or more primary cooperatives to provide its members with sectoral services) are all eligible to register under this Act (whose membership are secondary cooperatives, and whose goal is to advocate for and engage public and private sector entities on behalf of its members).

**Table 2.3: Notable events for cooperative development in South Africa**

<b>Date</b>	<b>Notable event</b>	<b>Achievement</b>
1892	The first cooperative was formed in South Africa	In Pietermaritzburg, the first fully recognised consumer cooperative was created.
1908	The 1 <sup>st</sup> Cooperative Act was passed	Other associations were permitted to register cooperatives under the Cooperative Societies Act as a result of this (Transvaal)
1922	The Cooperative Societies Act of 1908 was signed into law, and it was later revised in 1922 and 1925.	This gave cooperatives complete authority across South Africa, and it became the Cooperative Societies Amendment Act of 1925.
1939	Farmers' credit cooperatives are supported by the Catholic Church in Natal.	As a means of fostering economic activity and financial discipline, the Catholic church advocated the formation of credit cooperatives for black farmers.
1981	Cooperatives Act of 1981	CFIs were legally recognised as a business form that may be registered as trade cooperatives, but deposit acceptance was prohibited. It also allowed for the registration of black-owned agricultural cooperatives.
2004	First Policy on Cooperative Development	The policy set the groundwork for the establishment of cooperative law, strategy, and support mechanisms for cooperative development across the economy.
2004	Cooperative Development Strategy (2004–2014)	Increase cooperatives' competitiveness and contribution to the national economy through improving their capacity to engage in all markets and decreasing market failures that cooperatives confront.
2005	Cooperative Act of 2005	To make provisions for cooperative registration, creation, and regulation.
2007	Cooperatives Regulations	Ensuring that the Act is proclaimed and that the Cooperative Act is effectively implemented.

2010	CIS launched	The award, which has a cap of R350, 000, aims to increase the profitability and competitiveness of cooperative firms by lowering their operating expenses.
2012	Integrated Strategy on the Development and Promotion of Cooperatives (2012–2022)	Through financial and non-financial assistance, guarantee that cooperatives are recognised and permitted to thrive in all areas of the economy.
2013	The cooperatives amendment Act No. 6 of 2013 was assented by the President and published in the Government Gazette No. 36729	The national apex organisation, a Cooperative Development Agency to give financial assistance, a Cooperative Tribunal to resolve conflicts, and a Cooperatives Advisory Council to do policy research are all introduced.
2016	Formation of National Apex Cooperative of South Africa (NACSA)	To generate good jobs for everyone, alleviate poverty, democratise economic ownership and power, and rebuild the economy to satisfy everyone's basic human needs.

**Source: Mushonga, Arun and Marwa (2019:261)**

## **2.9 Post independence South Africa Cooperative Legal Framework**

The government adopted new cooperatives development policy in 1994 in light of South Africa's cooperative heritage and progress as well as the political developments that year.

### **2.9.1 The Cooperative Act of 2005**

The Cooperatives Act No. 14 of 2005, based on South Africa's cooperative heritage and current political developments, acknowledges the importance of cooperative values such as self-reliance, self-help, self-responsibility, equality, democracy, and social responsibility (RSA, 2005). It recognises the potential of a sustainable and independent cooperative movement to significantly contribute to the economic and social development of South Africa, including the creation of employment opportunities, revenue generation, promotion of broad-based black economic empowerment, and poverty alleviation. The Act also acknowledges that fostering diverse and viable long-term economic enterprises within the cooperative sector will benefit the entire South African economy. Rena (2021) alludes that the government is committed to establishing a favorable legal framework that supports the development and growth of cooperatives, with the Companies and

Intellectual Property Commission (CIPRO) being responsible for their registration, operation, and management in the country.

The Cooperatives Act, No. 14 of 2005 in South Africa reflects the government's recognition of the potential and significance of cooperatives in achieving economic empowerment, poverty reduction, and sustainable development (Mushonga et al., 2019). The Act aims to ensure that international cooperative principles are embraced and implemented in the country. RSA (2005) noted that the Act allows cooperatives to register and operate separately from their members and provides targeted support for emerging cooperatives, particularly those owned by women and black individuals. In post-apartheid South Africa, cooperatives have been recognised as a valuable tool for community development, offering opportunities for disadvantaged women to enhance their household income. Rena (2017) opines that the Cooperative Development Policy of 2004 and the Cooperatives Act No. 14 of 2005 have laid the foundation for cooperative development in historically marginalised communities. These initiatives aim to reduce disparities between urban and rural businesses while promoting social entrepreneurship. By emphasising local community and environmental care, these projects prioritise a common ethic of community economic development (Raniga, 2021). Ethical economic decisions and community development practitioners contribute to a transformative post-capitalist mission centered on interconnectedness and empowerment.

### **2.9.2 The Cooperatives Amendment Act, No. 6 of 2013**

The Cooperative Amendment Act, No. 6 of 2013 addressed various concerns related to cooperative growth in South Africa. Christian et al. (2024) claim that the Act incorporated cooperative ideals and ICA principles, as well as registration and application processes aligned with ILO definitions. One significant development was the establishment of a single National Apex Cooperative, which serves as an advocate for the private sector and government (DTI, 2015). The National Apex Cooperative also evaluates policy proposals aimed at fostering the growth and success of cooperatives across all economic sectors. To constitute the National Apex Body, there must be a minimum of three operational tertiary cooperatives at the national level and a minimum of five operational multi-sectoral cooperatives at the provincial, district, or municipal level.

The Cooperatives Act of 2005, with its three-tier structure comprising primary cooperatives, secondary cooperatives, and tertiary cooperatives, was consolidated through the establishment of the national apex organisation. A primary cooperative is defined as a cooperative formed by at least five individuals with the aim of providing employment or services to its members (RSA, 2013). The

second tier, secondary cooperatives, is composed of two or more primary cooperatives working together to provide sectoral services to their members, including legal entities. Nyawo and Olorunfemi (2023) highlight that the Cooperative Amendment Act of 2013 introduced the concept of social cooperatives, which are not-for-profit entities that provide social services to their members. The Act categorises main cooperatives based on their size, including small, medium, and large, although specific definitions for each category are not provided. RSA (2013) noted that Category ‘A’ primary cooperatives are required to submit an annual report to the registrar for each financial year, signed by the cooperative's directors, without the necessity of an audit or independent examination.

The primary objective of the Cooperative Act of 2013 is to reduce the failure rates of cooperatives and address governance, structural, compliance, and sustainability issues that existed previously (RSA, 2013). It establishes a Cooperatives Development Agency, which aims to promote and support cooperative development through both financial and non-financial assistance. Gumede et al. (2022) assert that the South African government recognises the potential of cooperatives in job creation and economic growth, leading to various initiatives aimed at strengthening and expanding the cooperative sector.

**Table 2.4: Summary of Cooperatives Amendment Act, No 6 of 2013**

Legislative	Main issues addressed by the Act	Notable effects
<p>The cooperatives amendment Act No. 6 of 2013 was assented by the President and published in the Government Gazette No. 36729.</p>	<ul style="list-style-type: none"> <li>○ To provide cooperatives principles and compliance with cooperatives principles, including application and registration in line with ILO definition.</li> <li>○ Call for the establishment of a single National Apex Cooperative.</li> <li>○ Outline the mandate of National Apex Board which is to lobby government and private sector making policy recommendations that may improve and grow cooperatives in the economy.</li> <li>○ The National Apex Board represent the interests of the whole cooperative</li> </ul>	<ul style="list-style-type: none"> <li>○ Facilitated a boom in the registration of new cooperatives that never seen in South Africa.</li> <li>○ The number of new registered cooperatives almost quadrupled.</li> <li>○ Majority of the new registered cooperatives are black women-owned and youth-owned cooperatives.</li> </ul>

	<p>movement at both national and international level.</p> <ul style="list-style-type: none"> <li>○ The National Apex structure like cooperatives as a whole is an independent structure from the government and cannot be controlled by the government.</li> </ul>	<ul style="list-style-type: none"> <li>○ Most of the new entrants remain vulnerable and very weak and require high sustained level of support.</li> </ul>
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**Source: Author’s own creation (2023)**

### 2.10 Management of Cooperatives

According to the Singh et al., (2019), managing cooperatives is a complex task that involves developing policies, providing excellent service, and achieving operational efficiency. Unlike other businesses, cooperatives have a unique management structure that balances ownership and operations. Members of cooperatives are both owners and customers, and the cooperative is run for their benefit rather than for profit (Atmadja et al., 2021). The distinctiveness of cooperatives lies in the integration of ownership, governance, and clientele. Miroro et al. (2023) claim that in traditional businesses, capital comes from investors, labor is performed by employees, and administration is carried out by staff. In contrast, cooperatives rely on their members/owners for capital, labor, administration, and customer base (Ciruela-Lorenzo et al., 2020). This cooperative model sets it apart from conventional enterprises.

**Table 2.5: The difference between cooperatives and other business enterprises**

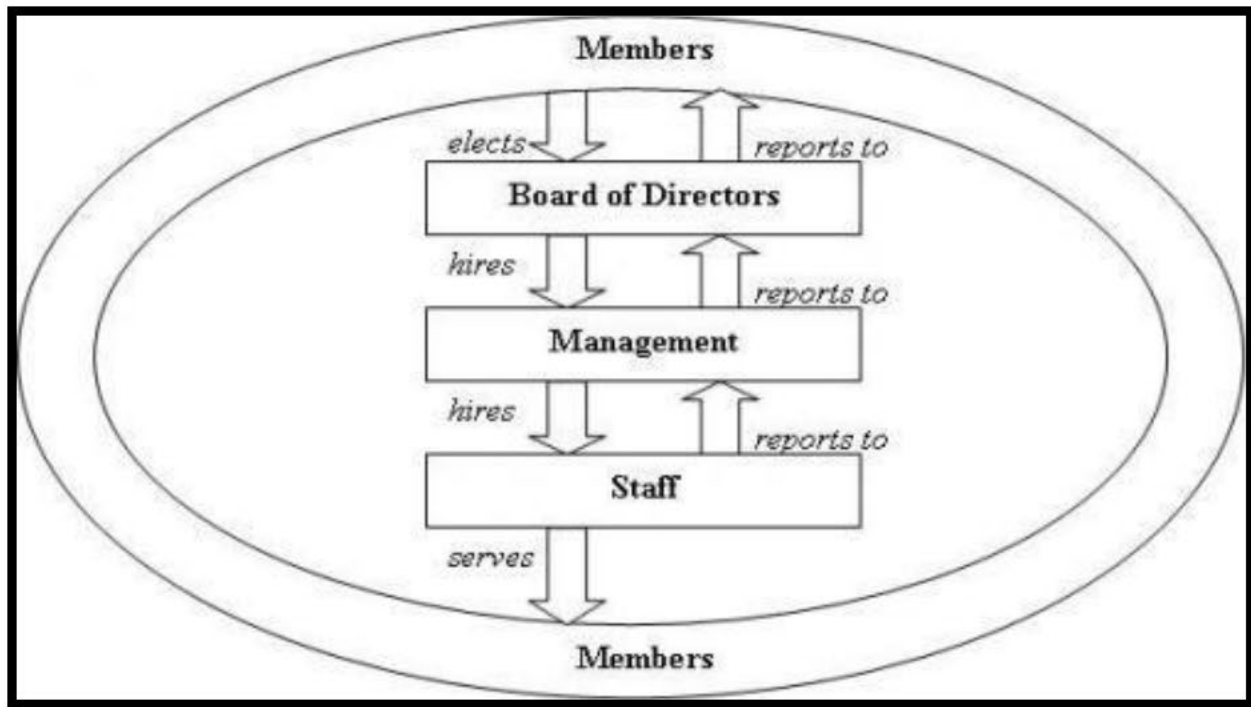
Market		Market	
Private Companies		Cooperatives	
Investor	Users - Raw materials Suppliers	Members Suppliers of raw materials	Members – Owners

**Source: Kalogiannidis (2020:455)**

Kontogeorgos and Sergaki (2020) posit that cooperative shares are owned exclusively by members and cannot be traded. Investment in cooperatives is only possible through membership. While recent

attempts have been made to attract funds from non-members, cooperative ownership, management, and surplus distribution differentiate cooperatives from other business models (Kalogiannidis, 2020). The principles of self-help, self-reliance, democracy, and solidarity form the foundation of cooperatives, rooted in ethical values of trust, honesty, and social responsibility. Sandoval (2020) claims that, participation in democratic decision-making is a privilege reserved for cooperative members. Cooperatives are voluntary organisations controlled by their member-owners, adhering to universally accepted principles of cooperation. As members surrender their independence to central management, they contribute to the collective identity and functioning of the cooperative, referred to as the "collective" stage (Atmadja et al., 2021).

Cooperatives adhere to the democratic control principle, where members are fully informed and actively participate in decision-making processes (Kalogiannidis, 2020). Bauwens, Huybrechts and Dufays (2020) argue that the Annual General Meeting (AGM), consisting of all cooperative members, serves as the highest decision-making body, followed by the elected Council or Board of Directors. The management committee, including the manager and other key positions, has the authority to approve cooperative operations. Bianchi and Vieta (2020) asserts that while the manager is responsible for daily operations, the board of directors relies on the manager's expertise and oversight. This cooperative management structure ensures accountability and places members at the top of the organisation, with the board answering to the membership. Strong managerial skills and a clear understanding of the cooperative's goals and bylaws are required for managers, regardless of membership status (Bauwens et al., 2020). Overall, the cooperative structure emphasises member participation, democratic decision-making, and managerial accountability.



**Figure 2.4. The management structure of a cooperative (Source: British Columbia Cooperative Association, 2015:23).**

According to Fisher et al. (2020), unlike in other organisations where hierarchical authority is used, no one may influence others' perceptions of the group action in a cooperative. Sandoval (2020) interprets this to mean that effective management of cooperation depends on the involvement of the entire membership, which is affected by the members' commitment and trust. Depending on the knowledge they have about the organisation, the members must decide whether to trust their cooperative. Information that increases their level of trust and level of commitment by leading people to assume that the organisation is sound in terms of expertise, dependability, and precision (Fisher et al., 2020).

## **2.11 Successful Development of Cooperatives**

In order for agricultural cooperatives to expand, it is important to consider the following factors:

### **2.11.1 A Recognised Legal System and Government Policy**

For cooperatives to function successfully and efficiently, there is need to have an appropriate legal framework (Afolabi & Medu, 2023). Government policy affects the societies' registration, which establishes the parameters of their existence. de Oliveira and Teles (2019) found that governments have enacted policy procedures that prevent cooperatives from operating effectively as a result of the

restructuring of many economies in an effort to adopt market-focused changes. Governments have created cooperatives using a top-down method, leaving members with no say in decisions on things like product pricing and marketing. Members have thus been prevented from claiming ownership of the organisation that ought to have been their own.

Nyoro (2019) notes that while cooperatives have the ability to develop rural areas in most economies, this chance has been lost. As a result, government policies should embrace a more democratic and participatory approach in the cooperatives' day-to-day operations. According to Lomuria et al. (2020), the government in Kenya, for instance, has over the years maintained an institutional framework to advance the cooperative movement in recognition of its crucial role in the nation's economic development. However, a strong legal foundation does not ensure cooperative success. Lomuria et al. (2020) use the Kenyan Act of 1997 as an example, which intended to offer cooperative members more control over their organisations but instead led to reports of corruption and poor management, the division of cooperatives into smaller groups, and resource theft. The author suggested that these inconsistencies as a result of the cooperatives' lack of planning for this independence.

### **2.11.2 An Enthusiastic Initiator and Champion**

According to Odero and Wanyama (2020:71), "at least one individual among the group that has leadership skills and takes the initiative to represent the group" is necessary for the effective formation of a cooperative. This person should be charismatic and trustworthy. Kir (2021) suggest that majority of successful cooperatives in India have "odd leadership," notably during the cooperative's initial establishment. In the early phases of a cooperative, a champion is required who is not looking to take advantage of the group (Odero & Wanyama, 2020). This champion can be a cooperative member or not. This person voluntarily suffers the costs associated with rallying the group and securing the necessary resources, such as threats and challenges (Afolabi & Medu, 2023). As a result, there is a need for community leaders who are not politicians to inspire, support, and foster the growth of a cooperative (Billiet et al., 2021).

### **2.11.3 Resources**

According to Kgobe (2020), a cooperative cannot only be created in situations where the advantages of participation, such as access to goods, markets, loans, services, inputs, etc., outweigh the disadvantages of membership (contribution of resources such money, equipment, labour, time, land, e.t.c). Organising skills, procedures, financial resources, and technology resources is essential for

ensuring that the cooperative's goals are accomplished (Ajates, 2020). Every cooperative needs certain resources in order to thrive, including land, time, money, skilled and unskilled labour, information, a market for the produce, equipment, infrastructure, and a suitable legal framework (Muñoz-Martínez et al., 2020). As a result, cooperative members must decide on policies and procedures for the procurement, distribution, and use of these resources. The farmers' willingness to contribute money to their cooperatives has led to the success of agricultural cooperatives in Japan (Fabusoro, Maruyama & Fapojuwo, 2020).

#### **2.11.4 Training and Education**

Cooperative members need to undergo frequent education and training in an effort to improve their level of organisation comprehension (Muñoz-Martínez, Monge-López & Torrego Seijo, 2020). In order to make educated decisions, cooperative members need information about their organisation, their partners, and the resources they use (Dendup & Aditto, 2020). The only way for this information to get to the membership and inspire them to behave constructively is through effective communication and education. Communication and careful coordination are required for this. So, in addition to dedication and communication, coordination is also essential for effective cooperative management (Kgobe, 2020).

According to Ndlovu and Masuku (2021), the cooperative movement should instruct and inform the general public, elected officials, opinion leaders, vendors, and young people about the advantages of genuine cooperation. They advise cooperatives to educate and train their members and staff if they want them to carry out their responsibilities well, and they also point out that keeping the members constantly informed strengthens their loyalty to the cooperative. According to Rashidipour (2020), a cooperative's success is greatly influenced by the understanding and participation of its members in its activities. The author further clarify that the success of a cooperative is determined by the education levels, technical abilities, dedication, and connections between management and members. Kumar and Prakash (2019) acknowledge that cooperative members and staff need ongoing training in management, marketing, and practical skills like farming if it is an agricultural cooperative. According to FAO and WHO (2018), cooperatives that provide sufficient training and carry out social development activities among their members and their communities can prevent novel poverty brought on by modernisation and economic restructuring.

### **2.11.5 Cooperative External Support**

Cooperatives leverage associations, active externalities, contracts, and reciprocal interactions to maximise their potential compared to other organisations. Kumar and Prakash (2019) argue that collaborating with public and private entities is crucial for their success, requiring strong ties to development and regulatory organisations. Cooperatives interact with other cooperatives, the community, government, suppliers, customers, and civil societies. In South Africa, the cooperative movement is structured hierarchically and horizontally by economic sector, facilitating support in areas like marketing, education, and policy reform.

Therefore, Kgobe (2020) mentions that, international cooperative associations and development agencies, such as ICA and the European Union, contribute to the cooperative movement in South Africa. Donor organisations like Swedish Cooperative Centre (SCC), Canadian Cooperative Association (CCA), and USAID Cooperative Development Program (such as World Bank) have assisted cooperatives through capacity building and funding initiatives (Nasar, Das & Pati, 2021). For instance, the SCC provided support to cooperatives in various areas, including institutional capacity building, curriculum development at the Cooperative College of Kenya, funding for cooperative consultations on the Cooperative Societies (Amendment) Act of 2004, revival of the institutional capacity of KNFC, and funding the Intensive Cooperative Management Improvement Scheme (ICMIS) to enhance the management of specific cooperatives (Wanyama, 2009: 23). Measures like cooperative mergers and reforms have contributed to the success of the cooperative movement in countries like Japan (Fabusoro et al., 2020).

### **2.11.6 Cooperative Governance and Management**

Cooperative development relies on effective internal coordination, communication, and a clear governance framework that promotes consensus and transparency (Kgobe, 2020). Fisher et al. (2020) argue that motivated and experienced management is crucial in designing and implementing business policies that cater to members' interests while fulfilling entrepreneurial goals. Establishing "mutual responsiveness" based on trust and support is key to managing cooperatives, along with aligning the interests of cooperatives and employees to foster constructive contributions and commitment to joint efforts (da Silva, Baggio and Santos, 2022).

Effective management of cooperatives necessitates expertise in resource acquisition and maintenance, decision-making, rule establishment, and equitable surplus distribution among

members (Ndlovu & Masuku, 2021). Kalogiannidis (2020) emphasises the active participation of cooperative members at three levels: providing resources, participating in decision-making, and producing benefits. In the context of India's electrical sector, poor performance can be attributed to management and governance issues (da Silva et al., 2022). Kumar and Prakash (2019) highlight the importance of a strong and effective board of directors for the success of well-governed enterprises. Skilled staff, accompanied by relevant training, are crucial for efficient cooperative control, and educational initiatives promoting good governance principles are necessary. Sebhatu et al. (2021) assert that inadequate governance in Kenya's context resulted from an uninformed membership electing a board lacking leadership skills. Furthermore, Abera, Haji, Legesse and Sassi (2021) observe that Ethiopia's dairy cooperatives faced challenges due to mismanagement, political interference, and limited market access, leading to low productivity and unattractiveness for the poor.

The cooperative's principal goal, which is to serve the mutual interests of its members, is highlighted by the cooperative principles/rules described above (Section 2.5), which set a cooperative apart from a capital business enterprise (Wanyama et al., 2021). The descriptions of the nature and operation of cooperatives seem to be strongly related to "collective action," which is when independent people engage in a group project of shared interest and effort in an effort to gain benefits for both parties. Cooperatives are recognised as examples of "collective action" by academics of collective action (Holahan & Lubell, 2022; Ostrom, 2004)

### **2.12 Agricultural Cooperatives and Self-organised Collective Action**

Guttman (2021) define collective action as the activity carried out by a group (either directly or on its behalf through an organisation) in pursuit of members' perceived interests. According to Guttman (2021), collective action occurs whenever two or more people pool their resources in order to achieve a common objective. Holahan and Lubell (2022:20) define collective action as "any action that provides a shared good." Therefore, collective action occurs when individuals agree to put up joint effort in the hopes of achieving a common goal.

The ICA (2005) and Ostrom (1990) provide similar definitions of cooperatives as self-governing organisations that address economic, social, and cultural needs through voluntary collective action. Agricultural cooperatives, which support member farmers, were the focus of this investigation, categorised into marketing cooperatives, farm supply cooperatives, and other cooperatives based on their primary functions (Holahan & Lubell, 2022). Members of these cooperatives contribute time,

effort, and capital in pursuit of shared benefits, including economies of scale, business negotiations, communal commodities, and environmental services. Ostrom's study identified factors essential for enduring self-governing collective action organisations, which align closely with the guiding principles of the ICA cooperative (Bottazzi & Boillat, 2021).

Sacchetti and Tortia (2021) emphasis the significance of open membership and participatory decision-making for the sustainability of self-governing Common Pool Resource (CPR) organisations. Collaboration among cooperatives is essential, highlighting the need for cooperatives to engage with other entities at various levels. The foundational values of cooperatives, including self-help, self-responsibility, democracy, equality, and solidarity, are rooted in ethical principles such as trust, honesty, and social responsibility (ICA, 2007). Guttman (2021) posit that dealing with uncertainty and taking responsibility for finding solutions are common challenges faced by participants in long-lasting CPR institutions, requiring innovative approaches to foster cooperation within small groups. Pansera and Rizzi (2020) argue that national policies, including cooperative policies, can either facilitate or impede cooperative development, emphasising the importance of establishing rules and registering cooperatives with the government to initiate collective action. Effective self-governance through collective action involves creating and enforcing norms, monitoring compliance, and implementing graduated consequences for violators. Fisher et al. (2020) assert that clear communication channels and affordable dispute resolution procedures are necessary to address potential miscommunication between appropriators and their representatives. The success of self-organising collective action depends on the presence of knowledgeable and skilled members capable of setting and maintaining operational standards, monitoring adherence, and resolving conflicts using methods such as collective decision-making, monitoring, gradually increasing penalties, and conflict-resolution techniques (Westerink, Termeer & Manhoudt, 2020). Therefore, these aspects are particularly relevant in the context of managing self-organised collective action within agricultural cooperatives.

### **2.13 Factors that influence Cooperatives Governance**

The characteristics of a community engaging in collective action involve the establishment of rules that define criteria for participants, resources, partnerships, and management structures. According to Pansera and Rizzi (2020), clear boundaries and defined limits are essential in reducing uncertainty and preventing free-riding. Examining circumstances during rule or institutional changes helps identify community qualities for collective action in common pool resource (CPR) settings. Holahan

and Lubell (2022) opine that, factors such as group size, heterogeneity, incentives, prior experiences, enabling environment, skills, and leadership assets play a role in determining the likelihood of successful self-governance. Additionally, Guttman (2021) suggests that, individuals must recognise the existence of a problem, have the autonomy to act collectively, and be motivated by the future of the group to invest in collective action. Factors such as group size, heterogeneity, incentives, and a supportive environment influence the potential success of self-organising CPR institutions. In the paragraphs that follow, each factor will be briefly discussed.

### **2.13.1 Group Size**

According to Sacchetti and Tortia (2021), smaller groups have a stronger incentive for collective action as they perceive a higher proportionate share of benefits. In contrast, larger groups are discouraged from collaborating due to their lower pre-negotiated percentage share of benefits. Guttman (2021) support the idea that smaller groups foster collective action by emphasising how individual behavior affects others and the overall achievements of the group, rather than focusing on numbers or larger percentages of benefits. In larger groups, individuals recognise their contributions have minimal impact but still expect their agreed-upon share of benefits, leading to a desire to free-ride among a larger number of individuals (Guttman, 2021). Scheffran (2023) state that in smaller groups, it is easier to identify negative behavior, promoting positive actions and reducing free-riding through close supervision. Consequently, individuals in larger groups perceive their contribution as minor and resort to free-riding, whereas individuals in smaller groups are more encouraged to engage in collective action due to a higher likelihood of success through effective monitoring and coordination.

### **2.13.2 Incentives or Coercion**

People are plagued by opportunistic behaviour or the obsessive urge to free-ride or evade (Guttman, 2021; Scheffran, 2023). They contend that in order for bigger groups of rational, self-interested people to cooperate in an effort to further their shared goals, they must either provide incentives or use coercion. A reward lowers an individual's contribution to the cost of achieving shared benefits (Guttman, 2021). However, they point out that this also depends on personal preferences and requirements, and that what is motivating for one person may be ineffective for another. Economic incentives, like access to loans, grants, training, and education, and social incentives, like respect, friendship, and status, can be used to motivate rational, self-interested people to act in a positive way (Fernandez-Guadano et al., 2020). According to Fisher et al. (2020), in other situations, people are persuaded to act in concert or alter the status quo by means of coercion or unfavourable selection

incentives. Incentives and pressure might take the form of laws, rules, and other legal frameworks; frequently, they reduce the ambiguity that discourages collective action. Pansera and Rizzi (2020) admit that the long-lasting, autonomous CPR institutions she researched have incentives that allowed them to alter their own rules and advance over time.

### **2.13.3 An Enabling Environment**

According to Comfort et al. (2020), creating an environment that is conducive to collective activity has two meanings; both the physical surroundings and the political system can either encourage or discourage self-organising group action. The factors outside the control of participants include the amount and timing of rain, the presence or absence of illnesses and vectors. They are subjected to a great deal of uncertainty as a result, which can prevent them from acting in unison. Sacchetti and Tortia (2021) makes the point that participants' internal lack of information, particularly regarding the resources being abused and other people's behaviour, is the primary source of confusion. Participants' uncertainty is decreased by knowledge of the resource being utilised, anticipated weather patterns, and available inputs. While confusion resulting from ignorance fades with time, uncertainty brought on by players' tactical behaviour persists. The environment or enabling factors make the advantages of collective action greater than the disadvantages (Zang, Wang, Ke & Su, 2022).

Government policies can encourage or discourage the creation of new collective action groups or the modification of existing ones (Sacchetti & Tortia, 2021). Autocratic government policies hinder self-governance in collective action by not promoting the creation or modification of rules. Therefore, Westerink, Termeer and Manhoudt (2020) suggest that situations where participants are supported in creating their own norms by external governmental authorities are the only ones in which successful self-governing in collective action may exist.

### **2.13.4 Heterogeneity or Homogeneity**

Guttman (2021) emphasises that the level of heterogeneity in collective action affects its formation and sustainability. Khan (2023) suggests that recognising and utilising differences for mutual benefit can increase individuals' inclination to engage in cooperative behavior. However, homogeneity tends to dominate. Scheffran (2023) notes that heterogeneity arises when the gap between the rich and the poor is relatively narrow, and shared expenses become a barrier for the less privileged to participate or benefit from collective action. Homogeneous groups have a higher likelihood of achieving successful self-governance through collective action (Guttman, 2021).

Moreover, Ostrom (2010) and Knapton, Renstrom, and Bäck (2022) argue that a sense of identity plays a subtle yet influential role in decision-making, group formation, and member recruitment within collective action. This sense of identity can develop through self-governing collective activities, either within institutional frameworks or through shared positions in associations. Partelow and Nelson (2020) highlight that membership boundaries define who is included and excluded, contributing to the formation of identity. Legally binding contracts further reinforce these boundaries. Sacchetti and Tortia (2021) assert that a person's sense of identity fosters dedication, attitude, importance, self-categorisation, and group narratives.

### **2.13.5 Binding Agreements**

The initial step in initiating and guiding collective action is helping the members identify their shared issue, driven by the need to collectively overcome difficult circumstances (Paarlberg et al., 2021). A genuine desire to find solutions to common problems in an unpredictable and complex environment is essential (Willhite, 2020). Binding agreements, which establish written rules and regulations governing participant roles, resource allocation, and provision, play a crucial role (Paarlberg et al., 2021). These agreements reduce uncertainty stemming from opportunistic behavior and resource appropriation (Westerink et al., 2020). Historical examples such as the long-standing cooperatives in the Swiss Alps, with legal papers dating back centuries, illustrate the significance of formal agreements (Ostrom, 2004).

Past successes or examples of successful collective action models serve as motivations for engaging in collective action (Guttmann, 2021). Individuals' assessments of past experiences shape their expectations and influence their willingness to participate. Learning from previous experiences helps individuals make informed decisions about the potential outcomes of collective action (Holahan & Lubell, 2022). Those who have benefitted from collective action are more likely to engage in efforts to change existing rules. Observing successful existing groups can also inspire people to participate in collective action. Shared history and a sense of a shared future contribute to the willingness to work together (Fernandez-Guadaño et al., 2020). The long-term benefits of collective action often require a long-term investment mindset, where individuals anticipate future benefits for their descendants (Scheffran, 2023). Over time, participants establish shared norms and a notion of "appropriate behavior" based on their common history, enhancing the likelihood of successful group action (Holahan & Lubell, 2022).

### **2.13.6 Community Leader**

According to Willhite (2020), the establishment or modification of rules in collective action depends on the presence of agents who exercise power, possess leadership abilities, and have access to resources. Due to their legitimate position and ability to frequently cover the costs of transformation, these leaders or champions have earned the respect of the community. These executives are able to guide the company to higher success since the community readily accepts their recommendations (Paarlberg, Walk & Horning, 2021). In light of this, the seminal work of Ostrom (1990) summarises community characteristics that support self-organised collective action in Table 2.5.

### **2.13.7 Resources**

Collective action refers to the collaborative utilisation of resources within a group setting, with the aim of achieving shared benefits. This section explores into the aspects of resource availability, sustainability, and collaborative efforts in the context of collective action. According to Boillat and Bottazzi (2020), for individuals to engage in collective action, there needs to be a consistent and reliable supply of the resources involved. These resources should be locally accessible in small quantities, while also being safeguarded against depletion or termination (Guttmann, 2021). Whether the resources are naturally occurring or human-made, they possess the potential to be depleted over time, but their utilisation remains necessary. However, at times, locating and acquiring these resources can be challenging and financially burdensome. While the resource system may exist within a given setting, its inaccessibility due to high costs can hinder its effective utilisation. Westerink et al. (2020) emphasises that widespread access to the resource system is a crucial prerequisite for collective action. In pursuit of mutual benefits, individuals, who are autonomous in their decision-making, may opt to collaborate and employ the resources within their surroundings.

Dipierri and Zikos (2020) suggests that members engaged in collective action must collectively deliberate on the costs associated with resource usage. Furthermore, they must contribute other relevant resources such as time and labor, and assess the specific advantages that each participant stands to gain. Hence, for effective collective action, it becomes imperative to establish sets of norms for resource appropriation and provision, ultimately leading to self-governance. The details of these resources are discussed in Section 3.5.2 as livelihood assets.

**Table 2.6: A summary of community attributes that govern cooperatives**

<b>Community attribute</b>	<b>Influence on cooperatives</b>
<b>Group size</b>	Small groups can work more harmoniously since individual gains are so high.
<b>Incentive/coercion</b>	Rewards or force encourage group action
<b>Enabling environment</b>	Collective action can be encouraged by enabling circumstances, such as favourable governmental legislation.
<b>Heterogeneity or Homogeneity</b>	Depending on the group's past and current actions, either heterogeneity or homogeneity might encourage group action.
<b>Binding agreements</b>	Binding agreements foster commitment and trust, which encourages group activity.
<b>Leader/Champion</b>	A leader inspires followers, accepts costs, and so facilitates group action.
<b>Resources</b>	The availability and distribution of resources significantly influence the dynamics and success of collective action efforts.

**Source: Shisanya (2016: 67)**

#### **2.14 Management of Self-organised Collective Action**

Managing collective action involves initiating and maintaining collective efforts, acquiring and managing resources, and cultivating partnerships to advance the interests of the group (Shi & Ling, 2023). This requires the establishment of working regulations, their monitoring, and enforcement. Effective management of collective action is crucial for overcoming obstacles and ensuring sustainable livelihoods within the community. Organising plays a key role in maximising the benefits of collective action, as it involves leadership processes, the creation of structures and procedures, and the formulation of strategies to achieve goals (Kumari, Bharti & Tripathy, 2021). The process of organising leads to the establishment of an organisation that aims to advance the interests of its members (Ma, Chen, Che & Fang, 2019). However, Shi and Ling (2023) claim that collective action is often challenging due to the complexities of human behavior, biased laws, and the dynamics of resource systems. Participants in collective action willingly relinquish some decision-making autonomy to adhere to group decisions and norms. Challenges such as developing new rules, making credible commitments, and ensuring mutual monitoring among actors pose obstacles that need to be addressed for effective collective action management (Guttmann, 2021). Consequently, dealing with these issues is one of the requirements for effective collective action management.

### **2.14.1 Knowledge and Expertise**

Every organisation needs a manager to oversee and coordinate its operations in addition to other subject-matter specialists in that organisation's industry. According to Dipierri and Zikos (2020), effective management of collective action is therefore dependent on pertinent knowledge and skill; otherwise, the process degenerates into an intractable one, leading to the dissolution of collective action. Participants should employ or obtain externally if they lack the necessary skills because collective action cannot thrive without knowledge and expertise. Cooperating people make use of rules or their absence (Comfort et al., 2020). In an effort to maintain the organisation, the government or the individuals involved establish rules pertinent to particular situations. Ling (2019) divided organisational rules into three categories; (i) Operational rules that affect the decisions members make on a daily basis; (ii) Collective choice rules that members, their officials, and authorities employ to indirectly influence operational rules. (iii) Constitutional rules specify how the norms for collective choice should be drafted. They outline how the organisation should be handled.

### **2.14.2 Decision-making**

The decision-making process includes the creation of rules and regulations (Khan, 2023). Making a choice or choosing the best course of action is part of the decision-making process (Comfort et al., 2020). Saxena (2020) suggests three truths concerning decisions need not be hidden from policy analysts: (i) A decision by itself has no effect; (ii) It is impossible to foretell whether a decision will be good or bad; and (iii) We must remember that the effects of our decisions last far longer than the time we spent making them. Analysing the participants in collective action's level of adherence to the rules as well as the rules' soundness is crucial in this situation.

Decision-making and subsequent implementation are influenced by the power dynamics present within an organisation, even at the level of a single person, where power is defined as potential force (Ling, 2019). Undoubtedly, power structures like class, wealth, political and administrative structures, pressure groups, technical expertise, and professionalism have a significant impact on how decisions are made and even carried out. Power can take many different forms, including information, professionalism, access to resources, information, and technical know-how (Hasanov et al., 2019). According to Shi and Ling (2023), utilising power or authority to implement choices is one way to do so in organisations. However, in a self-organised collective action setup, power is held by the participants. Rule changes have a cost, even for the self-organising in collective action organisations (Ostrom, 2010). In situations where the players lack power, this can be quite difficult.

According to Ling (2019), when there was heterogeneity, rule modifications made the poorer members withdraw from collective action. Collective action fails when none of the participants can afford the price of the inevitable change in the rules.

### **2.14.3 Commitment**

Participants must demonstrate a sincere commitment to following the regulations (Westerink et al., 2020; Ling, 2019). As long as participants are assured that the group benefit will be realised and the other principles are adhering to the rules, compliance with the rules is possible. Westerink et al. (2020) argues that external enforcement or pressure is necessary for principals to feel certain that others are following the rules as well. However, Shi and Ling (2023) asserted that external force is ineffective in self-organised collective action. Internal enforcement performs better through self-organised collective action after researching the long-standing CPR institutions. The cost of monitoring depends on the rules that are in place. Pansera and Rizzi (2020) provide an example of a strategic rule that is analogous to the adage "set a thief to catch a thief." For instance, in irrigation systems, two actors who are most interested in cheating are typically placed in close proximity to one another such that, while one is waiting to extend his time, the other is waiting to start sooner than his term. She comes to the conclusion that issues with mistrust, prolonged disloyalty, and lack of oversight can be resolved by the participants themselves. Within their specific areas of operation, participants are better equipped to create and enact their own rules, verify compliance, and impose graded fines that specify who is entitled to what (Westerink et al., 2020).

### **2.14.4 Communication and Information**

Principals' uncertainty is reduced by having access to information, particularly information about the resource's nature and information about other principals (Scheffran, 2023). Information encourages principals to commit to and trust one another since informed principals are more inclined to follow the established tactics. Conversely, exchanging shared commitment, increasing trust, developing and bolstering conventions, and building common identity can result in effective communication (Qin, Strömberg & Wu, 2021). The ability to effectively manage collective action and mobilise support for it both depend on communication.

Direct communication of the content structure is essential, this can influence participants in collective action to behave favourably or unfavourably depending on the structures emphasising responsibility and consequences of an action (Comfort et al., 2020). Actors can use communication to choose who to trust and even forecast the behaviour of other players. The advancement of moralisation within

the group is made possible by communication, which fosters a sense of community or group identity (Westerink et al., 2020).

**2.14.5 Conflict Resolution Mechanisms**

According to Fisher et al. (2020), conflicts between members of a group or between members and officials are likely to arise during collective action, necessitating the need for readily available, affordable conflict resolution venues. Because they were developed by professionals, the policies being implemented by the collective action participants are theoretically assumed to be clear. However, different people can perceive the same simple rule in various ways. Pansera and Rizzi (2020) clarifies that this is so that people might respond to the rule in many ways, some of which might be seen as violating it. It is essential to implement dispute resolution procedures in collective action in order to settle any potential conflicts. Fisher et al. (2020) notes that depending on the severity of the dispute, some may be settled locally by the group's leaders while others may call for established legal systems. A summary of the factors used to determine effective management in collective action is provided in Table 2.7.

**Table 2.7: Variables for management of self-organised collective action**

<b>Variable</b>	<b>Effects on management of collective action</b>
Skilled manager	Without a skilled manager, the institution's activities will not be managed properly and efficiently, and they will eventually fail.
Decision-making	Participants ought to be capable of making informed choices. A poor choice results in the failure of a group effort.
Formulation or change of rules	Participants should be able to establish their own ground rules and modify them as needed since they are more aware of their circumstances and surroundings.
Information, knowledge and communication	Free-riding and shirking issues are minimised through knowledge and information about the resources, activities, participants, and environment in which collective actors work. Communication boosts dedication.
Conflict resolution	Participants in collective action should have access to low-cost conflict resolution venues because disputes will inevitably emerge among them.

**Source: Ling (2019:117)**

Fisher et al. (2020) highlight several challenges that can hinder the establishment of collective action. Firstly, false assumptions about the willingness of a group of people to act collectively can undermine collective action efforts. Secondly, a lack of trust in both internal and external institutions can impede the formation of collective action, and reassurance of accountability is necessary for members to feel secure in their contributions. Thirdly, the participation of strong external interest groups can lead to unsatisfactory experiences and increased uncertainty, discouraging people from engaging in collective action. Fourthly, dishonesty, rent-seeking behavior, and disregard for norms and regulations among members can demoralise others and deter their participation. Lastly, barriers such as upfront expenses, time restrictions, and social disparities can prevent the involvement of the impoverished and underprivileged, limiting their ability to participate in collective action. Overcoming these obstacles is crucial to foster effective collective action.

### **2.15 Potential Benefits of Cooperatives**

Cooperatives offer advantages to both their members and non-members. They can achieve cost savings through economies of scale and reduce expenses related to buying, selling, storage, transportation, and services (Buendía-Martínez et al., 2020). Cooperatives prioritise addressing the basic needs of their members, providing better or specialised services that may not be widely available. Papilaya et al. (2021) argue that they offer a reliable supply of goods, reducing uncertainty for members, especially during scarcity and emergencies. Cooperatives are well-equipped to meet the demands of large-scale buyers due to their ability to gather goods of a certain grade or value. Centralised cooperatives can also benefit from legislative assistance negotiated with the government, such as tax exemptions (Serra & Davidson, 2021).

The cooperative allows its members to increase their income, which benefits both the local area and the country as a whole (Moon & Lee, 2020). According to Bolton (2019), 80% of Kenya's population derives money from cooperative operations, either directly or indirectly. Cooperatives are therefore important to the country's economy. Cooperatives, which are owned and governed by locals, foster the development of more thriving, investor-oriented firms, which eventually has an impact on the entire economy (Awoke, 2021).

Contrary to individuals, cooperatives are able to afford the resources (skills, materials and equipment) needed to make goods of high quality, thus they can offer their customers high-quality goods (Serra & Davidson, 2021; Papilaya et al., 2021). Cooperatives foster international collaboration by exchanging knowledge, expertise, and resources with counterparts in other nations

(Moon & Lee, 2020). Exports to other nations are another way cooperatives make money overseas. Cooperatives play a vital role in the development of employment opportunities in both urban and rural areas (Bolton, 2019). As of 2019, the cooperatives in Kenya directly employed 1.4 million individuals and indirectly employed roughly 14 million additional people (Prieto, Wairimu, Ndinguri & Kungu, 2020). Cooperatives, particularly agricultural cooperatives, play a pivotal role in local economic development, economic growth, employment creation, and poverty reduction. These member-owned and operated entities foster economic empowerment by enabling collective action, resource pooling, and shared decision-making (Kontogeorgos & Sergaki, 2020). Their contributions are multifaceted, impacting various dimensions of the economy.

### **2.15.1 Contribution towards Local Economic Development and Economic Growth**

Raniga (2021) emphasise that cooperatives, when adequately supported, are vital for producing locally sourced goods, creating jobs, localising the economy, and enhancing human resource development in local areas. The Indian government has set a positive example by providing financial support to social service agencies, cooperative banks, and the cooperative social movement (Sahoo et al., 2020). This support has benefited 69% of impoverished rural households in India, demonstrating the impact of funding and legal commitment on poverty reduction (Kir, 2021). In Africa, cooperatives are recognised as effective tools for social democracy and community development, with significant potential to improve the lives of impoverished households. According to Kgobe (2020), this approach aligns with self-help programs, people-centered development, and the economic needs of low-income communities. Promoting leadership among women and youth within cooperatives links community economic development to sustainable livelihoods. Cooperatives aim to employ bottom-up strategies that prioritise economic, social, and environmental actions centered on people and their resources (Sellare, Meemken, Kouamé & Qaim, 2020).

Cooperatives contribute significantly to local economic development by promoting inclusive economic participation, particularly in rural and underdeveloped areas. Agricultural cooperatives, in particular, enhance the productivity and competitiveness of small-scale farmers by providing access to markets, agricultural inputs, and technical knowledge (Mokoena et al., 2023). By facilitating economies of scale, cooperatives enable farmers to reduce costs, increase yields, and improve product quality, leading to enhanced income generation and local economic stability. Moreover, cooperatives stimulate local economies by reinvesting profits within the community, thereby fostering a cycle of economic growth (Sacchetti & Tortia, 2021). As cooperatives grow, they create

a multiplier effect, where increased incomes among members lead to higher demand for goods and services within the local economy. This, in turn, supports local businesses and contributes to overall economic growth (Rogan & Alfery, 2020). The role of cooperatives in promoting economic resilience is particularly crucial in South Africa, where economic disparities and regional inequalities are pronounced.

### **2.15.2 Contribution of Cooperatives towards Employment Creation**

One of the most significant contributions of cooperatives is their role in employment creation. Buendía-Martínez et al. (2020) suggest that cooperatives can create a number of jobs in three separate ways. Firstly, cooperatives provide direct jobs to the people working in either primary or secondary cooperatives. Secondly, members who participate in economic activities can earn a living and ensure a decent income. Thirdly, through the spillover of cooperative activities, people would be indirectly employed through opportunities and transactions created by cooperatives. In countries such as Kenya, Tanzania, Malawi and Zimbabwe, cooperatives have played a key role in helping unemployed women to break the cycle of poverty by tapping into their individual, group and community resources (Raniga, 2021). Cooperatives offer direct employment opportunities for members and non-members alike, particularly in sectors such as agriculture, manufacturing, and retail. Agricultural cooperatives, for example, generate employment by expanding agricultural activities, processing agricultural products, and engaging in value-added activities such as packaging and distribution (Mosia & Khalo, 2021).

In rural areas where formal employment opportunities are limited, cooperatives provide an alternative source of income and livelihood (Risal, 2020). By creating jobs and supporting small-scale enterprises, cooperatives help to reduce rural-urban migration and alleviate pressure on urban job markets. This is particularly important in South Africa, where unemployment remains a critical challenge, with the national unemployment rate hovering around 32.6% in 2023 (Statistics South Africa, 2023). Also, DSBD (2020) notes that the South African government is supporting cooperative development as an approach to create jobs and eradicate poverty among historically disadvantaged groups.

### **2.15.3 Contribution of Cooperatives towards Poverty Reduction**

It is widely recognised that economic globalisation and the unequal distribution of wealth and resources globally have exacerbated poverty and income inequality, both within and between countries (Raniga, 2021). The International Labour Organisation (2015) proposed the establishment

of cooperatives as a viable solution to alleviate global poverty, as they can build resilience across all socioeconomic sectors of society. Empirical evidence from countries such as Kenya, Canada, India, Italy, and Bangladesh indicates that the successful implementation of cooperatives is closely linked to supportive government legislation, intergovernmental collaboration, and the provision of relevant education and training within higher education institutions (Zhang, Benjamin & Miao, 2021). Cooperatives contribute to poverty reduction by improving access to resources, knowledge, and markets, thereby enabling marginalised communities to achieve economic self-sufficiency. Agricultural cooperatives, for instance, empower small-scale farmers by providing them with the tools and resources needed to enhance productivity and profitability (Sellare et al., 2020). This, in turn, helps to lift households out of poverty by increasing their income and improving their standard of living.

Furthermore, cooperatives often prioritise social and economic equity, ensuring that the benefits of economic activities are shared among members (Zhang et al., 2021). This collective approach helps to reduce income inequality and promotes social cohesion within communities. In South Africa, where poverty and income inequality are deeply entrenched, cooperatives offer a viable pathway towards inclusive economic development and poverty alleviation (Mokoena et al., 2023). Black Africans, particularly those in countryside areas, youths, women, and people with ill health could be the most active participants in achieving the goals of equalising the first and second economies. All cooperatives, including those in agriculture, are founded on the Ubuntu philosophy of collaboration and camaraderie (Khan, 2023).

### **2.16 Challenges faced by Agricultural Cooperatives**

Literature revealed that while many nations are beginning to recognise the value of cooperatives, the challenges these organisations encounter differ from nation to nation (Moon & Lee, 2020; Afanaseva et al., 2021). Pansera and Rizzi (2020) suggest that while there have been some notable successes in developing nations, there have also been numerous failures. Moon and Lee (2020) highlight key challenges faced by Rwandan agricultural cooperatives, including poor management, limited capital, weak member participation, insufficient training, societal feudalism, unclear policies, land fragmentation, and inadequate integration of activities like production, credit, and marketing. Collectively, these problems make it more difficult for agricultural cooperatives to operate efficiently and expand. Zantsi (2021) listed a few of the difficulties South African cooperatives face, including

a high attrition rate, difficulties with management and leadership, meddling from the government, and instability. Numerous poorly designed or unsustainable cooperatives were the outcome of this.

### **2.16.1 Poor Management and Leadership**

Moon and Lee (2020) opine that poor management and leadership within agricultural cooperatives is one of the common challenges. Management and leadership challenges are prevalent across various countries. For instance, Zantsi (2021b) identifies high attrition rates, leadership difficulties, and instability as some of the significant challenges faced by South African cooperatives. Similarly, Zhang et al. (2021) note that Ethiopian cooperatives struggle with weak accounting systems, leadership issues, and a lack of entrepreneurship knowledge among executives and staff. These problems are often exacerbated by a lack of professional management skills and inadequate training for cooperative members and leaders. Without strong leadership and proper management, cooperatives struggle to operate efficiently and face high attrition rates (Frimpong-Manso et al., 2023).

### **2.16.2 Limited access to Capital and Financial Resources**

Inadequate infrastructure and resource limitations further exacerbate the challenges faced by agricultural cooperatives. Moon and Lee (2020) claim that the restricted access to capital resources, hinders the ability of cooperatives to expand their operations and invest in necessary infrastructure. Restricted access to capital are significant barriers to the success of agricultural cooperatives, particularly in developing countries like Rwanda and South Africa (Zantsi, 2021). These issue is compounded by inadequate access to credit facilities, which limits cooperatives' ability to sustain and grow their activities. Mamo et al. (2021) identify poor infrastructure, insufficient extension services, and limited access to resources and land as significant barriers to the success of cooperatives. These limitations hinder their ability to expand operations and improve their overall effectiveness.

### **2.16.3 Internal Conflicts and Lack of Member Commitment**

Serra and Davidson (2021) argue that internal conflicts, such as disagreements among members and conflicts of interest, are also major challenges. These conflicts often stem from a lack of member commitment and poor management practices, leading to the eventual collapse of cooperatives. These issues are exacerbated by inadequate training and education among members and leaders, which hinders the effective operation of cooperatives (Serra & Davidson, 2021). Effective communication and active participation among cooperative members are critical for the success of these organisations. However, challenges such as insufficient member communication and low

participation rates can undermine the cooperative's operations and decision-making processes (Moon & Lee, 2020). Therefore, internal conflicts and a lack of commitment among members further exacerbate these issues.

#### **2.16.4 Inadequate Training and Educational Initiatives**

The lack of adequate training, extension services, and educational initiatives is a recurring challenge for agricultural cooperatives. Pansera and Rizzi (2020) highlight that cooperative colleges often serve government employees and school leavers, with training rarely available to primary cooperative members. This deficiency leads to a gap in knowledge and skills among cooperative members, which in turn affects their ability to manage and sustain cooperative activities effectively (Moon & Lee, 2020). A significant challenge for cooperatives is the lack of human resources, particularly in terms of skilled management and leadership. Cooperatives often struggle with a shortage of trained personnel, which affects their ability to operate effectively. This is compounded by a general lack of knowledge and understanding of cooperative principles among members, leading to poor decision-making and management (Serra & Davidson, 2021).

#### **2.16.5 Government Interference and Policy issues**

The misapplication of the cooperative concept for ideological or political ends is a significant challenge. According to Afanaseva et al. (2021), governments and parastatals often attempt to direct and regulate cooperative growth from above, frequently for personal gain. This top-down control leads to the creation of poorly designed or unsustainable cooperatives. As a result, traces of these state-run "pseudo-cooperatives" still exist in several developing nations (Mamo, Haji, Legesse & Sassi, 2021). Therefore, government interference and unclear or insufficient policies regarding cooperative development are also significant barriers.

#### **2.16.6 Socioeconomic and Structural Challenges**

Socioeconomic factors such as land fragmentation, the feudalistic characteristics of society, and the lack of infrastructure pose additional challenges to the success of agricultural cooperatives (Mamo et al., 2021). These structural issues limit the cooperatives' ability to integrate their activities, such as production, credit, and marketing, thereby reducing their overall effectiveness. Such fragmentation not only hampers productivity but also exacerbates inequalities within the cooperative structure, making it difficult to achieve economies of scale (Moon & Lee, 2020). Consequently, the lack of infrastructure, such as adequate roads and storage facilities, further complicates the logistics of cooperative activities, leading to inefficiencies and increased costs that negatively impact the cooperatives' competitiveness and sustainability.

### **2.16.7 Market Access and Bargaining Power**

According to Abera et al. (2021), agricultural cooperatives often face challenges related to limited market access and weak bargaining power. This is particularly problematic in competitive global markets, where cooperatives struggle to secure fair prices for their products and to market them effectively. Mamo et al. (2021) opine that the fragmented nature of cooperatives and their small-scale operations make it difficult for them to compete with larger, more established agribusinesses. Without adequate market information and strong collective bargaining strategies, cooperatives often find themselves at a disadvantage, limiting their ability to thrive in global markets (Ndlovu & Masuku, 2021).

### **2.16.8 Lack of Innovation and Modernisation**

The introduction of new technology, crop varieties, and production inputs is crucial for the sustainability of agricultural cooperatives. However, many cooperatives face difficulties in adopting these innovations due to limited resources and support (Rena, 2021). This lack of modernisation is exacerbated by inadequate access to training and extension services, which are essential for facilitating the adoption of new technologies (Mamo et al., 2021). Moreover, the reluctance to embrace change, often due to the aging cooperative membership, further hinders innovation and modernisation efforts (Zantsi, 2021). Addressing these barriers is essential for ensuring the long-term viability of cooperatives in competitive markets (Serra & Davidson, 2021).

### **2.16.9 Demographic Challenges and Illiteracy**

Zantsi (2021) asserts that the demographic profile of cooperative members, particularly the fact that many are elderly and illiterate, presents a significant threat to the cooperative movement. These factors limit the ability of cooperatives to adapt to changing market conditions and effectively implement modern management practices. The aging membership base is often resistant to new ideas and innovations, which hinders the adoption of technology and sustainable agricultural practices (Moon & Lee, 2020). Furthermore, illiteracy among members impedes their ability to access and understand market information, financial records, and training materials, further exacerbating management inefficiencies (Mamo et al., 2021). The lack of education also limits members' participation in decision-making processes, reducing the overall effectiveness of the cooperative's governance structures (Serra & Davidson, 2021). Addressing these demographic challenges requires targeted educational programs and youth engagement strategies to rejuvenate cooperative membership and enhance long-term sustainability (Pansera & Rizzi, 2020).

### **2.16.10 Challenges in Governance and Decision-making**

Governance issues and poor decisions are common challenges within cooperatives. According to Pansera and Rizzi (2020), governance issues, including the misuse of power by board members, negligence by managers, and the lack of secrecy in business affairs, can lead to poor performance or even the failure of cooperatives. Serra and Davidson (2021) suggest that a lack of knowledge, experience, and education among members and leaders contributes to these challenges, leading to poor performance or failure of cooperatives. These challenges are further compounded by difficulties in making timely and effective decisions within the cooperative structure.

### **2.17 Chapter Summary**

The main objective of this chapter was to provide an overview of the cooperative movement. It began by tracing the origins of modern cooperatives and discussing the conceptualisation of cooperatives. The guiding principles and values of the cooperative movement were highlighted, emphasising how cooperatives aim to meet both the social and economic needs of their members. The chapter acknowledged the significant role that cooperatives have played in improving the socioeconomic conditions of individuals worldwide and their contributions to the global economy. Additionally, the chapter concluded from a historical review of cooperatives in Africa that they thrive in environments free from government interference. The chapter also discussed the concept of collective action, where parties voluntarily cooperate to advance shared interests. The next chapter will examine into the theoretical foundations of sustainable rural livelihoods.

## **CHAPTER THREE: CONCEPTUALISATION AND THEORETICAL FRAMEWORK ON SUSTAINABLE AGRICULTURE**

### **3.1 Introduction**

This study of the literature aims to deepen the understanding of the conceptualisation and theoretical framework on sustainable agriculture, focusing on the role of agricultural cooperatives in enhancing rural livelihoods. The interaction between farmers, society, and the environment is evolving due to factors like dwindling resources, growing populations, environmental pressures, changing social norms, advancing technologies, and the increasing impact of climate change. These elements are expected to significantly alter agricultural practices and the entire food supply chain, from producer to consumer. The discussion begins with a general overview of sustainable development, followed by an exploration of the theoretical framework underpinning this study. It will then examine into sustainable agriculture and its importance. A detailed analysis of the influence of agricultural cooperatives on the sustainability of rural livelihoods will be presented next. Finally, the study will review the Sustainable Development Goals (SDGs). The discussion will clarify how agricultural cooperatives support rural livelihood sustainability, contributing to broader sustainable development goals.

### **3.2 General Overview of Sustainable Development**

Dahl (2024) defines sustainable development as the interplay between environmental preservation and economic growth. In the twenty-first century, the idea has gained widespread recognition as the objective of human society. The release of "Our Common Future" in 1987 marked a pivotal moment when the concept of sustainable development became widely acknowledged as a crucial aspect of global progress. According to Dănescu, Matei and Constantinescu (2021:20), the Brundtland Commission report, 'Our Common Future', defines sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." This definition underscores the balance between current development demands and the preservation of resources for future generations. This adage has gained widespread acceptance as a value of acceptable progress, with sustainability organically integrated into the economic realm. The Brundtland report emphasises the need for immediate action and is viewed as a global agenda for change toward a more prosperous, just, and secure future (Hajian & Kashani, 2021). It has undoubtedly sparked the world's unprecedented concern for the environment. Dănescu et al. (2021)

assert that sustainable development emerged as an attempt to shift perspectives on the planet due to increasing inequalities both within and between countries, rising poverty, particularly in developing nations, ozone layer depletion and global warming, the depletion of natural resources endangering certain animal and plant species, and the pollution of air and water.

Hajian and Kashani (2021) argue that sustainable development was initially seen as a preventive measure against ecological disasters caused by the excessive exploitation of resources and environmental degradation. The primary focus was on preserving a pristine environment. Today, the concept has expanded, encompassing economic and social dimensions as well. Many countries' financial assessments have demonstrated that rapid financial expansion has raised significant issues related to sustainable development, which incorporates social, economic, and environmental sustainability (Dahl, 2024). Škrinjarić (2020) contends that the concepts of development and sustainability, the two essential elements of sustainable development, preceded the term itself. Tsalis et al. (2020) suggests that sustainability and development might oppose one another, potentially leading to negative consequences. Neoclassical economists, however, argue that sustainability and development are not mutually exclusive. Eggert and Hartmann (2023) claims that sustainability cannot exist without development, and vice versa. The concept of development stems from historical Western notions of colonialism and imperialism, which entailed economic policy, political power, and infrastructure development. These ideas were instrumental for imperialists in marginalising certain nations (Fonseca, Domingues & Dima, 2020). This context explains the contemporary preference for development over expansion, as growth is viewed as merely a quantitative factor, overlooking essential qualitative elements like equality, health, and education (Škrinjarić, 2020). It is argued that growth represents a quantitative increase, while development signifies the unfolding of potential or qualitative improvement.

The Brundtland Report, published in 1987, highlighted substantial challenges in addressing sustainability and established the first targets. Zharova and Chechel (2020) note that critical areas requiring concrete action include fundamental human rights, implementing and monitoring environmental management standards, ensuring equal access and treatment without discrimination, and resolving conflicts peacefully through international cooperation. The Brundtland report asserts that sustainable development must be central to international thinking, benefiting participating states over the long term. It also promotes goals such as improving human welfare, distributing resources

equitably, and fostering development that preserves the environment for future generations (Dănescu et al., 2021).

### **3.2.1 Sustainability**

Eggert and Hartmann (2023) define sustainability as the goal of enhancing the social and environmental performance of the current generation without compromising the ability of future generations to meet their social and environmental needs. This definition is comparable to the definition of sustainable development found in the Brundtland report. Hajian and Kashani (2021) define sustainability as the multi-dimensional in nature where three independent but necessary pillars define it and these are economic, environmental and social. Similarly, Munasinghe (2019) defines sustainability development as relates to three interlocking goals which are environmental, economic, and social. Therefore, sustainability simply refers to a concept which involves that something be conserved at its current status for example, economic well-being or environment quality. The World Summit held in 1995 in Copenhagen and United Nation World Summit of 2005 both endorsed sustainable development as having three pillars- environment protection, social development and economic development (Castilla-Polo & Sánchez-Hernández, 2020).

The global economic system has generated several critical global public good or common property resource challenges, particularly in human relationship with environment, in the quest of wealth creation (Fonseca, Domingues & Dima, 2020). To name a few, greenhouse gas pollution, water security, deforestation, melting Arctic ice, and filthy, over-fished oceans are all current subjects. These issues are not only environmental, but also economic, given how much we rely on nature's resources to develop and perpetuate our prosperity. The pressure put on nature has risen dramatically since the mid-twentieth century, and it will continue to rise if business continues as usual (Kopnina, 2020). Furthermore, because ecosystems respond to stress in non-linear ways, catastrophic tipping points can occur quickly, with no way back - the ultimate structural risk (Munasinghe, 2019). Therefore, sustainability is a comprehensive approach that considers the social, ecological, and economic aspects, understanding that each of these elements is necessary to attain long-term prosperity. The environment, society, and economics are the three pillars of sustainability. Three requirements must be met by a sustainable society: its rates of pollution and emission should not surpass the environment's capacity to absorb them; its rates of use of non-renewable resources should not exceed the rate at which sustainable renewable substitutes are developed; and its rates of use of renewable resources should not exceed their rates of regeneration (Elkington, 1997).

### **3.2.1.1 Triple Bottom Line Concept**

John Elkington coined the phrase "triple bottom line" (TBL) in 1994 (Srivastava, Dixit & Srivastava, 2022). In the mid-1990s, Elkington sought to quantify sustainability by introducing the TBL, a new accounting framework used to evaluate performance in the corporate sector of the West (Nogueira, Gomes & Lopes, 2023). The TBL, also referred to as 3BL, 3P, or People, Profit, Planet, is a widely used term across various fields, including economics, environmental studies, governance, and management. According to Zaharia and Zaharia (2021), searching for "triple bottom line" on Google yields over 227 million results in less than 0.8 seconds, demonstrating the widespread integration of the concept into both everyday and professional discourse. The concept originated from a growing body of evidence challenging the traditional paradigm—central to classical political economy—that an organisation's goal is to maximise profits for investors and that the success of economic activities should be measured solely by the financial bottom line (Nogueira et al., 2023). Concerns over issues like labor standards, corruption, rising poverty rates, and environmental protection pushed the broader community to advocate for solutions.

One such initiative was SustainAbility, a think tank and consulting firm founded in 1987 by activists John Elkington and Julia Hailes (Srivastava et al., 2022). That same year, the Brundtland Commission released *Our Common Future*, which is credited with establishing the concept of sustainability. SustainAbility spearheaded efforts to promote the importance of proactively addressing social and environmental issues on corporate agendas. It also became the testing ground for the triple bottom line concept. Elkington introduced the TBL concept in his book *Cannibals with Forks: The Triple Bottom Line of 21st Century Business*, using a metaphor derived from the success of the French film industry. He argued that, like the success of actress Brigitte Bardot, the financial and environmental bottom lines (profit and planet) were insufficient to satisfy societal demands. The missing element, social justice (people), became the third component necessary for sustainable development. Elkington (2018) reaffirmed the TBL's significance, describing it as "a sustainability framework that examines a company's social, environmental, and economic impact".

TBL and sustainability are often used interchangeably. Calero, Moraga and García (2022) note that sustainability is sometimes defined using the same three components as TBL. Nogueira et al. (2023:625) define TBL as "the practice of sustainability," while Zaharia and Zaharia (2021:2) link TBL to sustainability, explaining that "TBL means programs, policies, and activities designed to

create or retain jobs and wealth in ways that contribute to environmental, social, and economic well-being over time." The United Nations (UN) also aligns TBL with sustainability. In 1987, the Brundtland Commission defined sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Hajian & Kashani, 2021:7). Fifteen years later, the UN adopted the TBL philosophy, further cementing the link between the two concepts: "the integration of the three components of sustainable development—economic development, social development, and environmental protection—as interdependent and mutually reinforcing pillars" (United Nations, 2002:2).

TBL is essentially a concept that integrates the growing environmental agenda with social and economic spheres (Elkington, 1997). It offers a framework for assessing organisational and business performance along three axes: economic, social, and environmental (Horsefall & Umah, 2022). Sometimes referred to as the "practical framework of sustainability," the TBL framework consistently emphasises the importance of these three dimensions in a balanced manner.

While TBL is designed to integrate and give equal weight to all three components, the literature reveals uneven usage of the term sustainability. Horsefall and Umah (2022) observe that in some studies, sustainability is primarily associated with environmental concerns, while others use it to refer to all three components, and still others focus only on the social aspect. TBL, however, balances all three dimensions, making the framework more coherent (Elkington, 1997). In contrast, studies on sustainability sometimes disproportionately emphasise one dimension over others. For instance, Nakyejwe, Kasimu, and Sabi (2021) observe that, while the economic aspect is frequently highlighted, the significance of sustainability was often understated in some research.

### **3.2.2 Livelihood**

Nunan (2022) defines livelihood as it includes the capabilities, assets and any activities needed to earning a living. The term capabilities, refers to an ability of persons or households to cope with shock and stress and this involves the ability of identify and utilise livelihood opportunities that may arise at a given time (Cornwall & Scoones, 2022). The term assets defined as the possessions with people in the form of basic social and material resources and the term activities is the means in which livelihood outcomes is achieved through combining assets and capabilities (Karki, 2021). According to Deng, Li & Zhang (2020), livelihood refers to the means used by people in obtaining the basic

needs such as shelter, water, food, clothing and medicines. This can be well-defined as a collective of various activities that involves basic human needs and also the ability to

### **3.2.3 Sustainable Livelihood**

The concept of sustainable livelihood extends beyond conventional approaches to poverty eradication, aiming to create enduring improvements in people's quality of life without compromising natural resources for current and future generations. Deng et al. (2020) define sustainable livelihood as the ability to sustain assets and capabilities without degrading the natural resource base, while effectively coping with and recovering from shocks and stresses. A livelihood is considered sustainable when it enables people to recover from seasonal shocks and stresses, maintaining or enhancing their assets and capacities both for the present and future generations (Su et al., 2021).

Nunan (2022) emphasises that sustainable livelihoods should simultaneously increase incomes and protect the environment, thereby enabling communities to meet their basic needs and reduce reliance on natural resources. This holistic approach also improves family resources, which in turn boosts school attendance, reduces early pregnancies and marriages, and enhances socio-economic outcomes (Jamshed, Birkmann, Feldmeyer & Rana, 2020). The sustainable livelihood framework aims to accelerate poverty reduction by focusing on the goals, scope, and priorities for development, ensuring that livelihood gains are long-lasting and evaluated using poverty indicators defined by the communities themselves (Tabares et al., 2022).

This concept also underlines the importance of sustainable development in achieving long-term stability and resilience within communities. As noted in seminal work of Scoones (1998), a livelihood includes the capabilities, assets, and activities required for a means of subsistence. It becomes sustainable when it can handle stresses, recover from them, and maintain or improve its capabilities and assets without depleting the natural resource base. The goal is to connect various components of poverty to prioritise strategic actions that support lasting development outcomes (Su et al., 2021).acquire such necessities through possible means either as an individual or as a group for sustainable basis with dignity.

### **3.3 Theoretical Framework**

#### **3.3.1 Sustainable Livelihood Approach**

Between 1987 and 1997, academics conceptualised emergent theories and practices, leading to the development of the sustainable livelihood approach (SLA) to evaluate the socioeconomic state of a place (Blessing, 2021). Researchers, practitioners, and policymakers contributed to the evolution of this method. Sometimes, they worked independently within the confines of their research areas or local communities; at other times, they collaborated through debates, essays, and joint efforts. Significant exchanges at key moments gave fresh momentum to the creation of the Sustainable Livelihood Approach (Conway, 2022). The dwindling availability of natural resources, so vital to rural livelihoods, propelled the SLA to its peak.

##### **3.3.1.1 Sustainable Livelihood Approach and its thrust Areas**

Robert Chambers and Gordon Conway of the Institute of Development Studies (IDS) are widely credited with coining the term "sustainable livelihood approach" (SLA). They defined 'livelihood' as follows: "A livelihood comprises the capabilities, assets (including both material and social resources), and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks, maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base" (Chambers & Conway, 1992). In this context, livelihoods encompass more than mere survival; they also involve the community's resources and its ability to manage and sustain them. Chambers' definition highlights the importance of intergenerational sustainability and the capacity to resist and recover from risks.

This definition forms the basis of the approach adopted by the United Kingdom's Department for International Development (DFID), as noted by Chambers and Conway (Jackson, 2021). Krishnaraj (2006), cited in Blessing (2021), offers a more comprehensive explanation of livelihood by emphasising the creation of institutions and integrating these institutions into development initiatives. Blessing (2021:180) explains: "a more realistic assessment of poor peoples' livelihoods and the factors that shape them; building a policy and institutional environment that supports poor peoples' livelihoods; support for development that builds on the strengths of poor people and provides them with opportunities to improve their livelihoods."

The concept of an "institutional environment" is central here. The Panchayatee Raj system and the Gram Shabha under the Forest Rights Act are two examples of such institutions. Livelihood, according to this definition, is a dynamic process rather than a static issue, shaping how sustainability

challenges should be approached. Maithreyi underscores the creation of institutional frameworks and policies, and outlines a development model that includes the livelihood concerns of the poor as a key component. The International Fund for Agricultural Development (IFAD) defines ‘sustainable livelihood’ as follows: "The sustainable livelihood approach (SLA) is a way to improve the understanding of the livelihoods of poor people. It draws on the main factors that affect poor people’s livelihoods and the typical relationships between these factors. It can be used in planning new development activities and in assessing the contribution that existing activities have made to sustaining livelihoods" (Jackson, 2021:5). Two elements stand out in this definition: (a) a framework for understanding the complexities of poverty, and (b) a set of guidelines for strategies and initiatives aimed at addressing and overcoming it. The seven guiding principles of the SLA aim to provide a solution that is flexible and adaptable to local variables, rather than prescribing a single, standardised approach.

### **3.3.1.2 Principles of Sustainable Livelihood Approaches**

These are the guiding principles for sustainable livelihoods. These principles serve as the distinguishing features of development solutions that have been created to address problems found when using the sustainable livelihood framework (Woyesa & Kumar, 2021). They do not dictate approaches or offer prescriptions; they are merely a guide. Tabares et al. (2022) assert that they can adjust to a variety of local situations;

- i) **Be people-centered:** The strategy starts by examining how people's livelihoods evolve throughout time (Tabares et al., 2022). All phases of the project are actively engaged by the participants themselves.
- ii) **Be holistic:** The strategy takes into account the fact that people use a variety of techniques to protect their way of life. Analysis of livelihoods is used in a variety of industries, regions, and social classes (Cornwall & Scoones, 2022). Multiple actors are recognised using the methods.
- iii) **Be dynamic:** The strategy aims to comprehend the influences on and the dynamic nature of livelihoods. SLA builds on peoples’ dynamic nature of livelihoods and what influences them.
- iv) **Build on strengths:** SLA builds on peoples’ perceived strengths and opportunities instead of focusing on the problems and need. It supports existing livelihood strategies. They aid and strengthen the poor's current coping mechanisms and means of subsistence.

v) **Use micro-macro links:** The approaches look at how institutions and policy at the macro level affect people's alternatives for a living and emphasise the necessity for policy to be influenced by local-level knowledge and the priorities of the underprivileged. SLA examines the influence of policies and institutions on livelihood options and highlights the need for policies to be informed by insights from the local level and by the priorities of the poor.

vi) **Encourage broad partnerships:** SLA counts on broad partnerships drawing on both the public and private sector.

vii) **Aim for sustainability:** Sustainability is crucial for long-term poverty reduction. Multiple factors contribute to the sustainability of livelihoods (Frankenberger, 1996; Blessing, 2021).

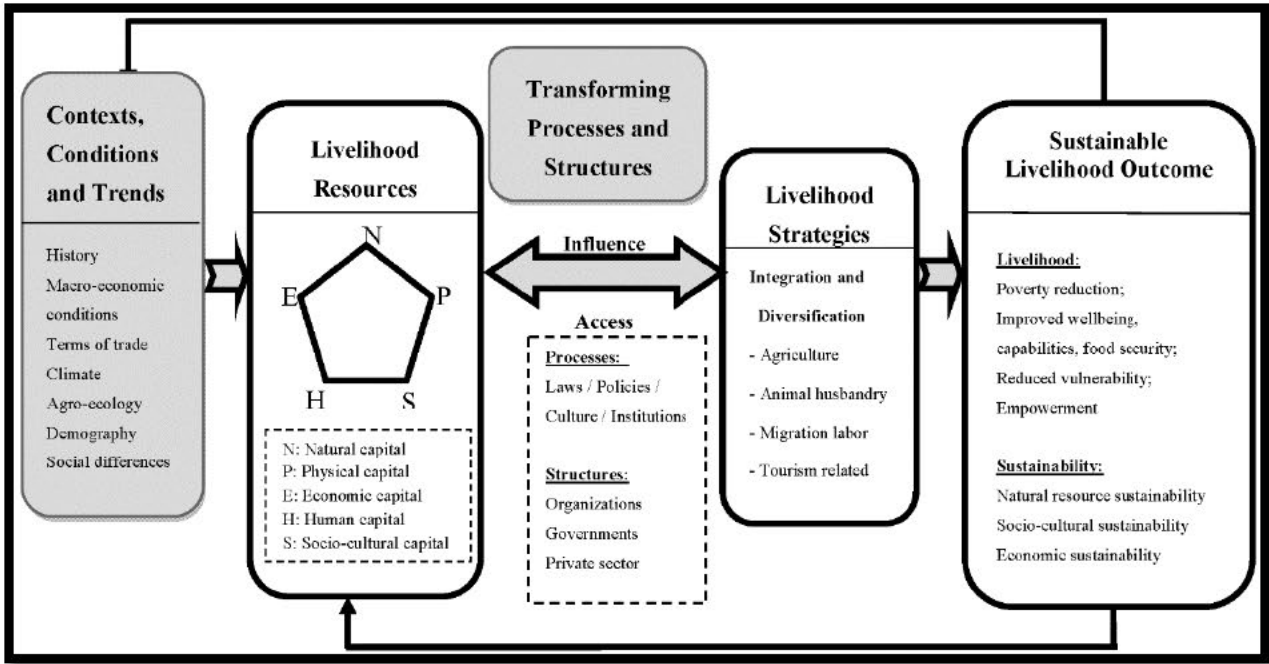
### **3.3.2 Sustainable Livelihood Framework**

The resources and livelihood assets closest to the individuals at the center of the SLA framework are those they can directly access. These may include natural resources, technology, individual skills, knowledge, capabilities, health, education, access to credit, or social support systems. The extent of access to these resources is shaped by the individual's vulnerability context, which includes factors such as economic instability, environmental risks, and social inequalities. Additionally, the prevailing social, institutional, and political environment plays a crucial role in determining the availability and accessibility of these resources (Jackson, 2021). The livelihoods approach was established in the 1990s and is still largely regarded as the most complete framework for understanding how people live (Blessing, 2021). It went out of style for a while, partially because it was based on a development perspective that had gone out of style - as development techniques sometimes do (Wang et al., 2021). However, it looks to be regaining popularity, and it is hoped that this time it will be used more broadly and rigorously, especially given the much more comprehensive understanding of its limitations that has grown over the last two decades (Jackson, 2021).

According to Woyesa and Kumar (2021), the livelihoods approach was developed in opposition to explicitly technical and technocratic approaches to rural development, which focused on increasing the efficiency and productivity of agricultural techniques in poor nations. These tended to produce technical advice, but because of their apolitical stance and lack of focus on people, they did not openly evaluate why individuals made the decisions they did, or what limits various people could face when trying to implement different solutions (Nunan, 2022). A livelihoods approach is motivated by a desire to learn "how different people live in different regions" as well as how and

why people make the decisions they do (Jackson, 2021). This refutes the notion that understanding people's well-being can be based merely on a technical or financial examination of the industries in which they work, or that this would be a sufficient basis for designing policies or actions to help them.

The core idea that people's ability to have a sustainable and adequate livelihood is molded by the interaction of the resources they may utilise and the institutions and "politics" that govern how and to what effect they can use those resources is rather uncontroversial. Woyesa and Kumar (2021) state that a fundamental tenet of sustainable livelihoods theory is widely acknowledged by practitioners of the approach: the necessity of comprehending and addressing the asset constraints, risks, and institutional framework that either facilitates or impedes the impoverished in their endeavors to construct means of escaping poverty. Various livelihoods frameworks were established as a result of this thinking, with DFID's Sustainable Livelihoods Framework (SLF) being the most widely used and conceptually complex (Jamshed et al., 2020). See Figure 3.3 below.



**Figure 3.1. Sustainable rural livelihood framework (Source: DFID, 2000; Su, Sun, Min & Jiao, 2018:6)**

In its most basic form, the notion depicts stakeholders as operating inside a Context of Vulnerability, wherein they have access to specific Assets. They have significance and worth because of the current social, institutional, and organisational context (Transforming, Structures and Processes). The

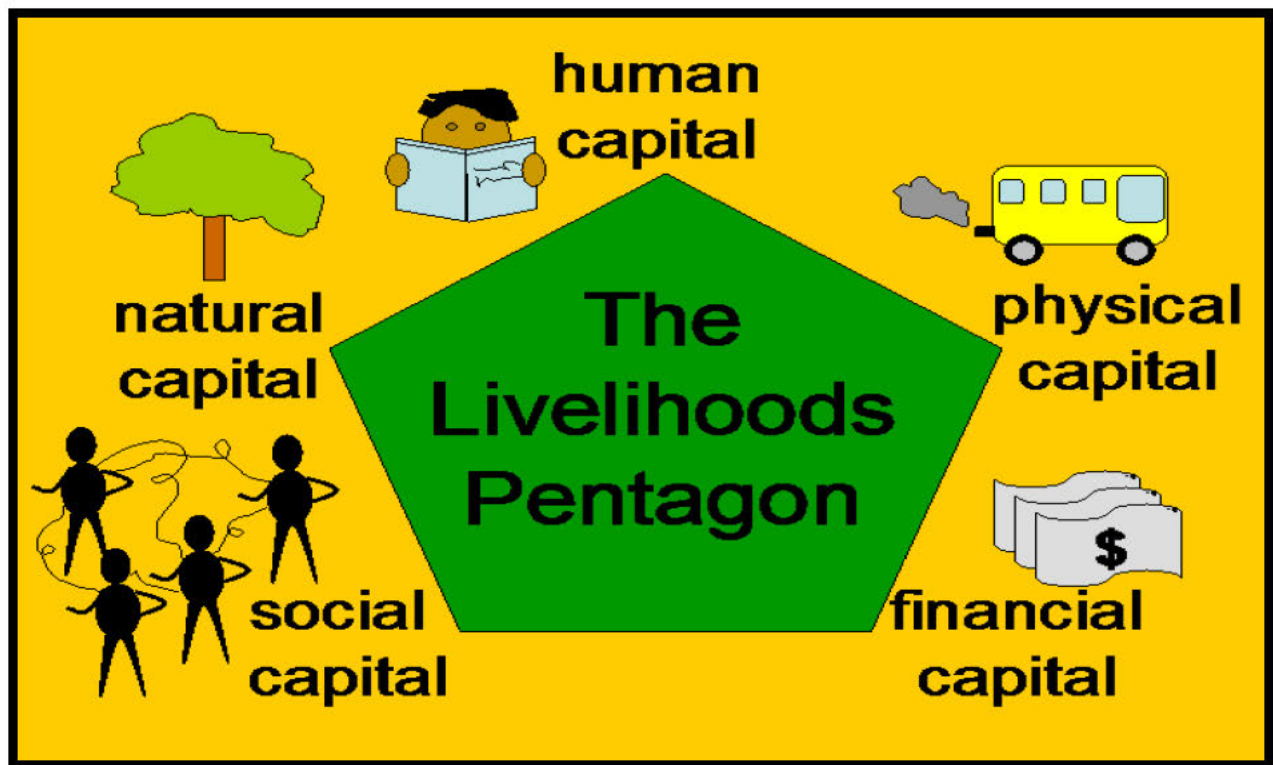
livelihood strategies that people may employ to reach their own self-defined positive livelihood outcomes are greatly influenced by this environment. According to Blessing (2021), the framework shows their relationships with one another, emphasising important factors and mechanisms as well as the different ways in which they are connected to livelihoods.

### **3.3.2.1 Vulnerability Context**

The vulnerability context shapes the external environment in which individuals live, and it gains significance as a result of direct effects on people's asset status (Li et al., 2020). It includes trends (history, macro-economic environment, agro-ecology, resource trends; demographic trends; governance trends), shocks (e.g., natural hazards such as earthquakes or floods; economic shocks; livestock, crop, or human health shocks; conflicts that may be at national or international levels); and seasonality (e.g., seasonality of employment opportunities, products or prices) and represents the part of the framework that is the most outside the stakeholder's control (Jackson, 2021). The contexts surrounding vulnerability are invariably multifaceted, encompassing aspects from the fields of informal power dynamics, politics and economics (local, national, and regional), demography, informal and formal institutions, and oftentimes conflict—all of which will have varying effects on individuals (Wang et al., 2021). The ways in which the forces interact are almost endlessly involved. It should be easier for the impoverished to deal with the aspects of their vulnerability context that they have little control over if they have access to the livelihood assets they need, are well-supported by service providers and enabling agencies, and can take advantage of markets, politics, rules, and norms (Cornwall & Scoones, 2022).

### **3.3.3 Livelihood Assets**

Li et al. (2020) suggest that the sustainable livelihood is focused on individuals first and foremost. So, a realistic and accurate understanding of people's skills (assets) is necessary in order to examine how people try to translate their assets into positive life outcomes. People need a diverse combination of assets to attain their self-defined objectives, since no one asset endowment is adequate to provide the necessary results on its own (Karki, 2021).



**Figure 3.2. Livelihood assets (Source: Jamshed et al., 2020:46)**

### **3.3.3.1 Human Capital**

It describes the abilities, know-how, job proficiency, and general well-being that allow people to follow different livelihood strategies and achieve their livelihood objectives. It seems to be a determining factor in the use of any other kind of asset and varies by family size, potential for leadership, skill levels, medical state, and other aspects (Li et al., 2020). According to Atmadja et al. (2021), human capital refers to the knowledge that people bring to the solution of any issue. This encompasses both skilled and unskilled labour, such as that provided by machine operators, attorneys, and bookkeepers. For collaborative action to continue, human abilities are essential. Participants in collective action should therefore decide how to develop and use the necessary human skills (Prieto et al., 2020).

### **3.3.3.2 Physical Capital**

It refers to producer goods and basic infrastructure, including accessible, reasonably priced transportation, secure housing and buildings, adequate water supply and sanitation, affordable, clean power, and information access (DFID, 2000). It is the organisation of material resources to advance the flow of future income (Guttman, 2021). Infrastructure and machinery, including roads, railroads, canals, bridges, computers, telephones, and other devices, are all necessary to make an

organisation's operations simple, effective, and efficient. Infrastructure and equipment are essential for monitoring each other's behaviour as well as for communication between members and other parties. Physical capital essentially affects social capital (Dipierri & Zikos, 2020). However, collective action makes it difficult to acquire infrastructure and plan for its upkeep, frequently due to the enormous expenditures required and the issue of free-riding, respectively (Boillat & Bottazzi, 2020). Making a choice on their purchase and upkeep is therefore a challenging and expensive undertaking for participants.

### **3.3.3.3 Financial Capital**

According to Su et al. (2022), financial capital is the term used to describe the resources people use to achieve their goals for their lives. These resources include having access to cash or its equivalent, which enables people to pursue a range of livelihood options. It relates to matters of money, such as funds for equipment purchases, infrastructure construction, payroll payments, training expenses, and information acquisition (Ma et al. (2021). Without money, no organisation can even function for a short period of time. Even the advantages of group action are typically quantified in monetary terms. Frequently, those involved in collective activity must establish rules governing the sums of money that members must contribute or earn (Garza & Salazar, 2021).

### **3.3.3.4 Social Capital**

According to Karki (2021), financial capital is the term used to describe the resources people use to achieve their goals for their lives. These resources include having access to cash or its equivalent, which enables people to pursue a range of livelihood options. Consolidating capital is the purpose of investing time and effort in activities with the hope of reaping rewards (Li et al., 2020). Capital comes in a variety of forms, including social, economic, and physical capital. In collective action, social and cultural capital refers to interpersonal ties, issues of shared values, loyalty, and trust; it also refers to the placement of human resources to enhance the flow of future earnings (Dipierri & Zikos, 2020). Participants require bargaining power to try to create institutional norms that are acceptable to all since the type of social capital in an organisation affects the institutional rules that govern it (Garza & Salazar, 2021). Community characteristics can be compared to social capital.

### **3.3.3.5 Natural Capital**

It refers to the natural resource stocks from which resource flows and services are obtained that are helpful for livelihoods (Su et al., 2022). These include water, land, forests, erosion protection, air quality, biodiversity degree, and rate of change. (DFID, 2000). Wang et al. (2021) asserts that the availability and accessibility of natural resources, such as land, are essential, and that their absence

fosters competitiveness and hostility. Appropriators invest in land or water and anticipate profiting from doing so; since nearly all activities, including house, processing, farming, and fishing, take place there, land is a necessary component of collective action. But frequently, the problem has been how to keep out people looking for quick gains and guarantee that only participants profit from efforts at communal action (Atmadja et al., 2021). Participants in collective action must have access to and be able to use land, and they must do it sustainably (Singh et al., 2019).

Group farms have financial benefits if they are effective (Blessing, 2021). They suggest that group farms lead to a concentration of individuals, or nucleus, that make the provision of infrastructure and services, such as transportation, energy, education, health care, and others, more economically viable. Group farms, however, have a poor track record and require a lot of dedication from the participants in order to be successful (Moon & Lee, 2020). According to Yazdanpanah et al. (2021), initiatives that originate from citizens rather than from the government or other external organisations frequently succeed. Pansera and Rizzi (2020) conclude that collective action was successful even on common land where there were appropriate, enforceable laws. The author used the Japanese mountain commons as an example, where group efforts were successful despite no appropriation rights being granted to individuals.

**Table 3.1: A summary of livelihoods assets**

<b>Livelihood asset</b>	<b>Effects on self-organised collective action</b>
<b>Human</b>	The abilities that allow people to pursue a variety of livelihood strategies and achieve their livelihood goals. These abilities include knowledge, skills, work competence, and good health.
<b>Physical</b>	The presence and availability of physical capital can significantly influence the effectiveness and outcomes of self-organised collective action by providing essential resources, infrastructure, and tools to support coordination and achieve collective goals.
<b>Financial</b>	Because there are customers for the goods and services provided by collective action, the group's activities are both socially and commercially viable.

<b>Social</b>	The social resources that people utilise to pursue their livelihood objectives, such as networks and connections that increase people's trust and ability for cooperation, as well as membership in more organised groups with their own set of rules, norms, and consequences.
<b>Natural</b>	Such groupings cannot survive without the use of land for collective action such as farming. Collective action can either facilitate or hinder the ability of individuals or groups to coordinate and collectively address environmental challenges and sustainable resource management.

**Source: Author's own creation (2023)**

### **3.3.4 Transforming, Structures and Processes**

Institutions, organisations, policies, and laws that influence lives are represented as transforming structures and processes. Ma et al. (2021) argue that they are crucial because they operate at all levels and effectively influence access to and conditions of exchange between various forms of capital, as well as the returns on any particular livelihood plan. Structures are the hardware (private and governmental organisations) that make and implement policy and laws, provide services, acquire, trade, and perform a variety of other operations that have an impact on people's lives (Karki, 2021; DFID, 2000). The "software" that determines how buildings and humans run and interact is made up of processes. Important livelihood processes may act as incentives for individuals to make decisions, accept responsibility for asset access, or allow stakeholders to change and replace one type of asset with another.

### **3.3.5 Livelihood Strategies**

The breadth and mix of actions and choices that people engage in order to attain their livelihood goals are referred to as livelihood strategies. Su et al. (2022) assert that they are dynamic processes in which individuals combine activities to suit a variety of requirements at various times and on various geographical and economic levels. The place they hold within the framework reveals their direct reliance on asset status and altering structures and processes. Changing asset status might aid or impede other procedures depending on the regulations and institutions in place (Cornwall & Scoones, 2022).

### **3.3.6 Livelihood Outcomes**

The accomplishments of livelihood strategies are known as livelihood outcomes. Strategies should lead to more income for households and individuals. There will be increased well-being such as self-esteem, access to services, health status, and a sense of inclusion. The reduced vulnerability results

in better resilience of social, environmental, and economic systems through an increase in their asset status (Munasinghe, 2019). Livelihood strategies also result in improved food security because individuals will manage to buy food on their own and not rely on handouts. Finally, a more sustainable use of natural resources will be achieved through, for example, having appropriate property rights. Cornwall and Scoones (2022) suggests that the "output" of the current configuration of elements inside the livelihood framework is understood through outcomes. They show what drives stakeholders to act in certain ways and what their top objectives are. They also help to predict how individuals will react to new possibilities and how to evaluate assistance activities (Karki, 2021; DFID, 2010).

The study's livelihood strategies reflect participation in agricultural cooperative-related activities. The legitimacy of agricultural cooperatives as a diversification tool, however, presupposes the acceptance of other, unrelated economic activity. A comprehensive approach is also necessary when using the SLF, therefore both should be considered even though emphasis will be placed on livelihood initiatives relating to the agriculture sector (Yazdanpanah et al., 2021). The outcomes of these livelihood choices then vary and may not always be in line with the desirable outcomes that people seek. The results may be contradictory and result in trade-offs that need to be resolved depending on the SLF. This is because, as illustrated in figure 3.3, the classification of livelihood outcomes as good or negative is based on the individual classifications of the people.

### **3.3.7 Role of the Regulatory Framework**

The elements of modifying structures and processes in accordance with the DFID (1999) are referred to as the regulatory framework. It is important to consider how public and private environments affect how individuals have access to resources, which in turn affects how likely they are to engage in agriculture-related activities (DFID 1999; Scoones 1998). These, in terms of the public sector, include governmental organisations' involvement in the agricultural sector, particularly the agriculture cooperatives, as seen in figure 3.3. Businesses, civil society organisations, and cultural norms and attitudes should all be rigorously examined with reference to the private sector (Karki, 2021).

According to Tabares et al. (2022), who emphasises that social relations—that is, people's places in society—have an impact on people's access to assets, gender and ethnicity will be given priority in keeping with critique of the SLF. Accordingly, gender and ethnicity will be covered by the Sustainable Livelihoods Framework's part on cultural norms and beliefs. Yazdanpanah et al. (2021)

posit that based on the sustainable livelihood definitions, the assets must be analysed. However, it is thought that all forms of capital are crucial for the study of rural agriculture. In seminar work by Shen (2009), the addition of the Sustainable Rural Livelihoods Framework's "attraction capital," which includes cultural and agro-ecological factors, such as activities related to the agricultural sector. But in this thesis, every resource used for a living will be examined in accordance with the Sustainable Livelihoods Framework.

Seasonality of employment is believed to be a significant factor in agricultural-related activities with regard to the context of vulnerability (Yazdanpanah et al., 2021). This will be considered along with the other elements of the vulnerability setting, such as potential trends and shocks.

### **3.4 Strengths of the Theory**

Cornwall and Scoones (2022) notes that there is a well-defined plan in place. Although the sustainable livelihoods approach stresses comprehensive diagnosis, this does not necessitate multi-sectoral solutions. Based on a thorough issue and opportunity analysis, single-sector initiatives and programs may be the best option. There are a variety of ways to get started with program activities. The research identifies the best entrance point (Su et al., 2021). There are information systems that are well-coordinated. The monitoring and evaluation indicators are explicitly related to the problem analysis and objectives. The relationships that are established in the holistic analysis are used to calculate cross-sectoral impacts (Su et al., 2022).

There is a guarantee of reflective practice. The purpose of program information systems is to record both the planned and unintentional impacts of program activity. Participatory monitoring systems and other parts of the monitoring and evaluation system have taught us these lessons (Su et al., 2021). The sustainable livelihoods method demonstrates the wide range of activities that individuals engage in to make a living, frequently in combination. This is especially significant in the case of the poor, who typically rely on a variety of economic activities for a living, and where the impact of each activity on the family economy is more essential than any one activity (Jackson, 2021).

### **3.5 Limitations of the Theory**

Poverty reduction is at the heart of the sustainable livelihoods strategy. So, what does it mean to be poor in the first place? Poverty is defined as a state of economic, social, political, cultural, and environmental deprivation on all levels (Maziriri & Chivandi, 2020). It is a state of involuntary deprivation that affects an individual, a community, or a nation. Fahad et al. (2023) define poverty as a lack of appropriate earnings and profitable assets to assure a livable ability, poor health, restricted

access to education and other basic services, homelessness, unsafe situations, social marginalisation, and rejection. Poverty, according to current studies, is a multi-faceted problem that cannot be reduced to economic hardship alone. If the strategy is to be put into effect, this question must be answered (Nunan, 2022).

There is an issue with "social relations of poverty," or how inequality and power relations perpetuate and replicate poverty on a local level. The sustainable livelihoods strategy of DFID places a strong focus on changing the structures and processes that have the potential to "transform" lives in ways that benefit the poor (Su et al., 2022; DFID, 1999). However, because informal institutions of social dominance and authority within communities' impact people's access to resources and economic prospects, the process is challenging. Furthermore, outsiders are frequently unaware of these injustices (Deng et al., 2020).

The pronounced imbalance that typically exists between men and women within a community has an impact on power dynamics. Gender issues are at the very least addressed in the analytical techniques and framework. It is one thing to guarantee that gender concerns are addressed; it is quite another to allow women to voice their true feelings, desires, and requirements in regard to specific livelihood difficulties in practice (Deng et al., 2020).

The realities of program planning, as well as sectoral prejudices. Planning development cooperation initiatives or programs seldom begins with a "blank sheet," but rather builds on previous support for a sector. Alternatively, it is formed by the receiving country's counterpart ministry's strategic goals and specific sector plans, which may impose strict limitations on the kind of concerns or activities that the donor can fund (Deng et al., 2020). In terms of analytical capability and information needs, the sustainable livelihoods technique is a demanding approach. Particularly if the parallel is a government extension agency, the counterpart institution may not have the people to interact as closely with the local community as the strategy anticipates. They may also be unable to make effective use of the strategy. This might be due to a lack of analytical skills or a general lack of awareness of poverty and livelihood difficulties (Fahad et al., 2023).

People are oddly invisible, despite the sustainable livelihoods approach's people-centered ideology. Capitals exist, such as "human, influences, institutions, policies, and so on," but where are the people? The concern is that sustainable livelihoods approach might devolve into a quantitative and mechanical classification exercise, which fits in nicely with postmodernist criticism. In fact, it

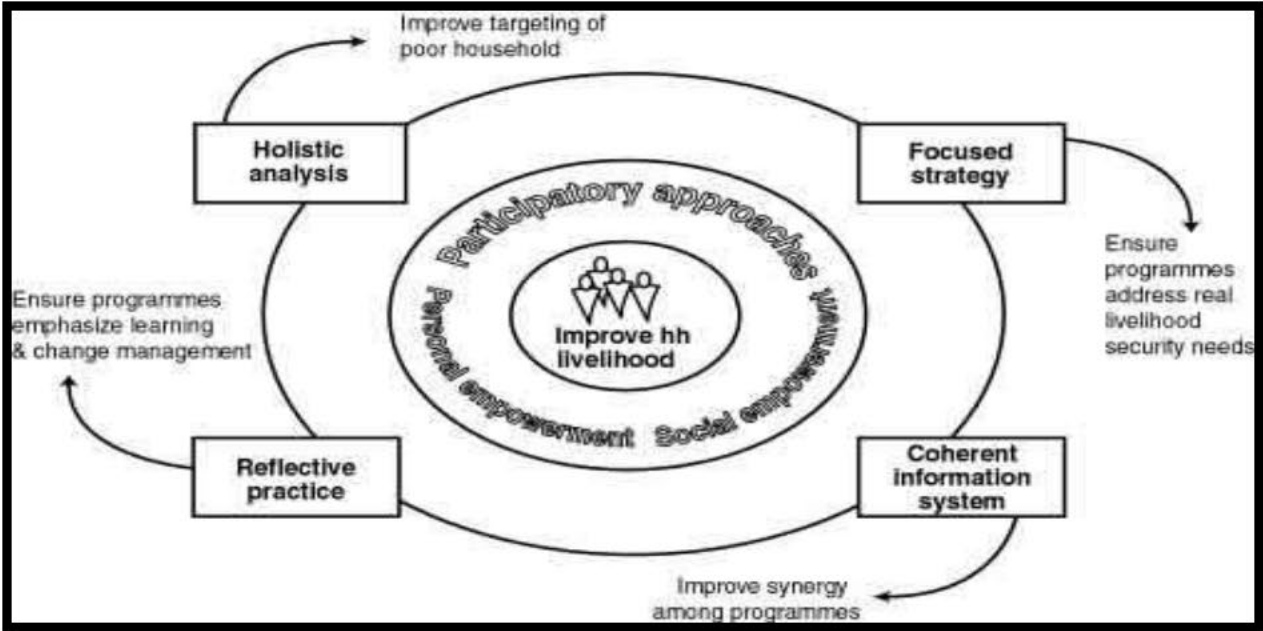
harkens back to the new home economics approach and its concentration on clusters of task-oriented activities, from which sustainable livelihoods approach arose (Fahad et al., 2023).

Despite the notion that "culture in general" is a crucial aspect for communities, sustainable livelihoods approach provides little about it (Deng et al., 2020). Important concerns such as leisure are also excluded from the sustainable livelihoods framework, which can have a significant influence on resources. Bahou, Sylla, N'zi and Atsé Boua (2021), for example, in a study of Atlantic billfish fishing off the coast of West Africa, noted the impact of recreational fishing on the stock and advised that it be included in a sustainable livelihoods approach alongside the more typical focus on fishing for subsistence.

**3.6 Operationalisation**

The Sustainable Rural Livelihoods Framework used in this thesis' analysis is based on the DFID (2000) components mentioned above, as well as the agro-ecology context developed by Su et al. (2018:6), who developed the so-called "Sustainable Rural Livelihoods Framework" to enhance the analysis of rural livelihoods and agricultural cooperatives.

According to Figure 3.2, it is assumed that the five resources—human, natural, financial, physical, and social capital—are influenced by the regulatory system and, as a result, either cause people to engage in agricultural or non-agricultural activities, which in turn result in particular livelihood outcomes.

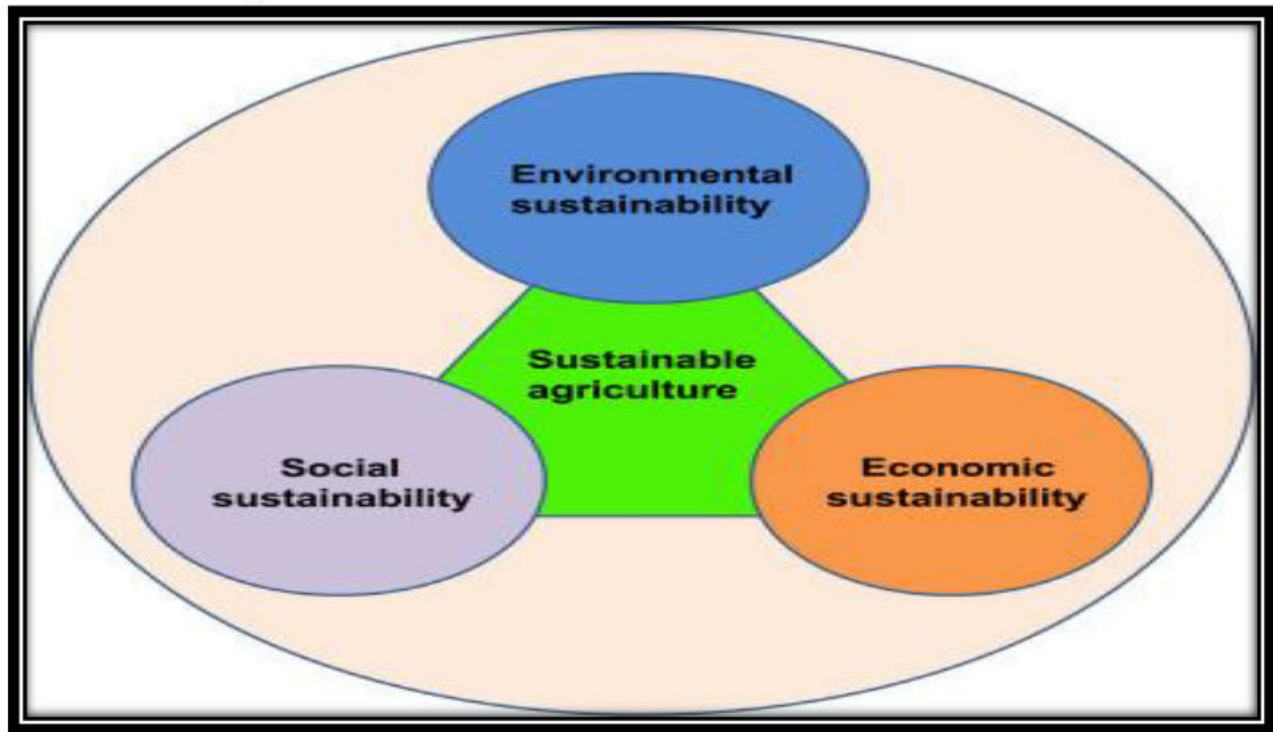


**Figure 3.3. Operationalising sustainable livelihood approaches (Sources: FAO, 2014:n.p)**

Understanding livelihoods and conducting a livelihoods analysis are the first steps in order to plan, set priorities, and eventually assess progress. The analysis of livelihoods has not been given a set order, nor has DFID created specific tools for it (Woyesa & Kumar, 2021). The emphasis is on utilising and improving the best tools currently available for the situation at hand (e.g. gender analysis, social analysis, stakeholder analysis, institutional appraisal, macroeconomic analysis, environmental checklists, strategic conflict assessment, strategic environmental assessment, governance analysis, market analysis and participatory methods). However, a unique DFID SLF (Figure 3.1) exists that offers an organisational foundation for study.

Deng et al. (2020) assert that sustainable livelihoods analysis offers a framework and numerous instruments to address a wide range of questions about poverty and its causes. It is not constrained by industries or pre-existing ideas of what is significant. The analysis, which uses a variety of perspectives and initially covers most or all facets of the sustainable livelihoods framework, is comprehensive and shallow (Tabares et al., 2022). The study is repeatedly narrowed and deepened as the key livelihood characteristics are discovered and the meaning and causes of poverty are better understood. Although participation is essential throughout, outside experts do have a role to play. The Sustainable Livelihood Approach (SLA) offers a comprehensive framework for studying how agricultural cooperatives influence rural livelihood sustainability. By emphasising a people-centered, holistic approach that builds on existing strengths and considers the dynamic nature of livelihoods, SLA is well-suited to evaluating how cooperatives contribute to socioeconomic resilience. The framework's focus on linking micro-level practices with macro-level policies allows for an analysis of how agricultural cooperatives facilitate access to assets like financial, human, and social capital, crucial for sustaining livelihoods (Karki, 2021). Additionally, the emphasis on sustainability in SLA aligns with the cooperative model's potential to foster long-term economic stability and environmental stewardship in rural areas (Frankenberger, 1996).

### 3.7 Sustainable Agriculture



**Figure 3.4. Sustainable agriculture (Source: Adams, 2019:126)**

Tahat et al. (2020) defines sustainable agriculture as a practising in which agriculture does not compromise the ability of both the present and future generations to be able to meet their human needs. Adams (2019:56) defines sustainable agriculture as "development that allows the preservation of land, water, plant and animal resources, which is environment-friendly, technically applicable, economically profitable and socially acceptable". Thus, farming in a way that enables to meet the society's present food needs but and not destroying the future. Qaim (2020) asserts that at the national level, as well as in society as a whole, sustainable agriculture makes a substantial contribution to long-term rural development.

Zhang et al. (2021) propose that agriculture has multifunctional qualities in addition to its primary job of producing food and contributing to food safety, has a variety of ecological, economic, and social purposes. Agriculture's various roles all connect to its natural state. Bauwens et al. (2020) asserts that agriculture's various activities are unquestionably intertwined, making it difficult to create a clear line that divides them. In light of this, Qaim (2020) provides a brief overview of three basic agricultural functions:

- i) economic function is expressed in rural activities or activities related to rural employment and income;
- ii) ecological function is related to environmental conservation and improvement, or to the environmental repercussions (both good and negative) of agriculture;
- iii) social function encompasses all facets of the agricultural sector and agricultural operations that are social, political, historical, and cultural.

According to Firoznia et al. (2021), the supply of more sustainable agricultural commodities is projected to expand in the future as a result of rising consumer awareness and government initiatives. Under this concept, farmers are supposed to produce in a way that balances the environmental, social, and economic dimensions of sustainability (Bauwens et al., 2020)). Numerous evaluations exist of farm sustainability and the underlying mechanisms found in empirical studies. Farm characteristics (e.g., organisational structure, size, indebtedness, major production), sociodemographic traits (e.g., age, education), and external factors (e.g., supply chain type, market prices, government efforts) are all associated with these variables (Tahat et al., 2020; Firoznia et al., 2021). Nonetheless, there has not been enough research done on supply chain organisations' contributions to social and environmental sustainability.

Firoznia et al. (2021) suggest that cooperatives represent a significant component of the agricultural business and may be able to assist in improving farm sustainability. Agricultural cooperatives can take a wide range of actions because their members are the cooperative's owners, investors, and customers (Candemir et al., 2021). By providing services, a stronger market position, and pooling funds to distribute expenses among members, they can incentivise farmers to improve their practices. Cooperatives can also encourage farmers to use these methods by reducing perceived risks and making investment more feasible. Moon and Lee (2020) observe that cooperatives, on the other hand, have inherent governance weaknesses, particularly in monitoring and administration, which can stifle progress. The unique governing structure of cooperatives may then produce mixed results, as the majority of members may be resistant to the necessary changes. Due to membership heterogeneity, farmers' incentives may be damaged.

### **3.8 The Influence of Agricultural Cooperatives on the Sustainability of Rural Livelihoods**

The objective of this section is to examine and discuss the existing literature on the influence of agricultural cooperatives on the sustainability of rural livelihoods. The researcher will focus on

exploring how these cooperatives impact the three key dimensions of sustainability: social, economic, and environmental. By reviewing various studies and frameworks, the analysis aims to understand the role cooperatives play in enhancing social cohesion, economic resilience, and environmental stewardship in rural communities. This discussion will clarify how agricultural cooperatives support rural livelihood sustainability, contributing to broader sustainable development goals.

### **3.8.1 Social Sustainability**

Candemir et al. (2021) argue that social sustainability is a complex concept that is difficult to define and implement. Adams (2019) defines social sustainability as the process of enhancing well-being—whether economic, social, or environmental—by fostering intergenerational transmission and pursuing justice, with a strong emphasis on social and environmental justice. Ojobo and Damian (2021) identify justice, power, equality, values, and well-being as key indicators of social sustainability. Candemir et al. (2021) categorise it into three orientations: bridge sustainability, which promotes behavior change for environmental goals; maintenance sustainability, which focuses on preserving socio-cultural patterns; and development sustainability, which addresses issues like injustice, inequality, and poverty.

However, social sustainability is sometimes viewed as the weakest pillar of sustainability, often overlooked and harder to implement compared to economic and environmental aspects. Castilla-Polo and Sánchez-Hernández (2020) highlight four key principles central to the social dimension of sustainability: a democratic civil society, human well-being, democratic governance, and equity. In an urban context, Ajates (2020) emphasises the importance of sustainable community development, including social inclusion, cohesion, and capital, as critical elements of social sustainability. Agricultural cooperatives play a vital role in promoting food security both nationally and globally. Oana and Rakhyun (2020) note that cooperatives contribute to rural employment, stabilise rural incomes, support the conversion of non-agricultural land for agricultural use, preserve cultural heritage, and improve living conditions according to national standards. Furthermore, Candemir et al. (2021) highlight the role of agricultural producers in landscape preservation and their ability to offer various services that benefit the land, economy, and society.

#### **3.8.1.1 The Social Function of Cooperatives**

A farmer's decision to join an agricultural cooperative may be influenced by factors other than money. Saz-Gil, Bretos and Díaz-Foncea (2021) investigate the elements that affect membership commitment. However, there are few empirical studies that focus on cooperatives' social role. The

literature covers a variety of aspects of cooperatives' social role, including employment, gender effect, and knowledge acquisition (Saz-Gil et al., 2021; Ajates, 2020). Theeuwens et al. (2021), found that belonging to a cooperative gives non-monetary benefits to Ugandan women, such as enhanced negotiation skills and decision-making ability. Shangase (2022) shows that cooperatives can help farmers make better use of chemical inputs when combined with a high level of social capital (communication, trust and common goals). As a result, the cooperative is in a position to help farmers produce safe food. Kayongo et al. (2022) conclude that agricultural cooperatives provide members with possibilities for knowledge and capacity improvement.

Saz-Gil et al. (2021) state that societal impacts must be included while measuring cooperative efficiency. The services and assistance offered by Chinese cooperatives to non-members are referred to as societal impacts. In their study, Vavrek, Kravčáková Vozárová and Kotulič (2021) examined the rural sector as a whole, not just cooperative members. Agricultural cooperatives, the authors show that they have a wide range of effects on their members, including training and technical help, as well as the ability to encourage local development, such as through the utilisation of local resources. According to Vavrek et al. (2021), cooperatives in Slovakia provide social benefits to their members while also contributing to local development. Unlike during the communist era, when they were essentially social objectives, they are now only "by-products" of economic objectives. Such non-profit businesses, on the other hand, are still common in Bulgarian cooperatives and act as safety nets in disadvantaged rural areas (Vavrek et al., 2021). In addition to providing services like childcare, sports facilities, affordable canteens, and grocery stores, cooperatives also uphold public infrastructure like streets and highways.

### **3.8.1.2 Social Capital**

Candemir et al. (2021) emphasise that social capital is one of the most valuable nonfinancial assets cooperatives can develop. According to Billiet et al. (2021), social capital consists of elements such as social trust, norms, and networks that foster collaboration and coordination for mutual benefit. Cooperatives enhance interaction among members and businesses, allowing members to use their collective knowledge to monitor each other's performance in commercial activities (Bianchi & Vieta, 2020). Social capital is believed to shape human behavior and influence how individuals act within a group, particularly in the context of environmental and socioeconomic processes. Billiet et al. (2021) further describe social capital as a collection of social ties, norms, and institutions that can exist at various levels—individual, group, state, or national. Similarly, Saz-Gil et al. (2021) assert

that social capital, as a nonfinancial asset, plays a critical role in collaborative efforts by shaping human behavior and group dynamics in socioeconomic and environmental contexts.

The relationship between social capital and collective action is viewed from two perspectives: some scholars examine how social capital within a society influences the formation and participation in collective action, while others explore how participation in a group can generate social capital. Candemir et al. (2021) note that the link between social capital and collective action is dynamic, with collective activities capable of developing, transforming, or eroding social capital. On the other hand, individuals can leverage social capital by using their social networks and collective action to gain access to resources and services (Bianchi & Vieta, 2020). According to a study on caring home service cooperatives conducted by Billiet et al. (2021), cooperatives generate social capital by enabling members to have ownership, engagement, interaction, training, and information exchange. These findings could be useful for agricultural cooperatives that rely on member trust, confidence, and commitment to succeed (Theeuwens et al., 2021). Mutual trust and reciprocity underpin members' commitment.

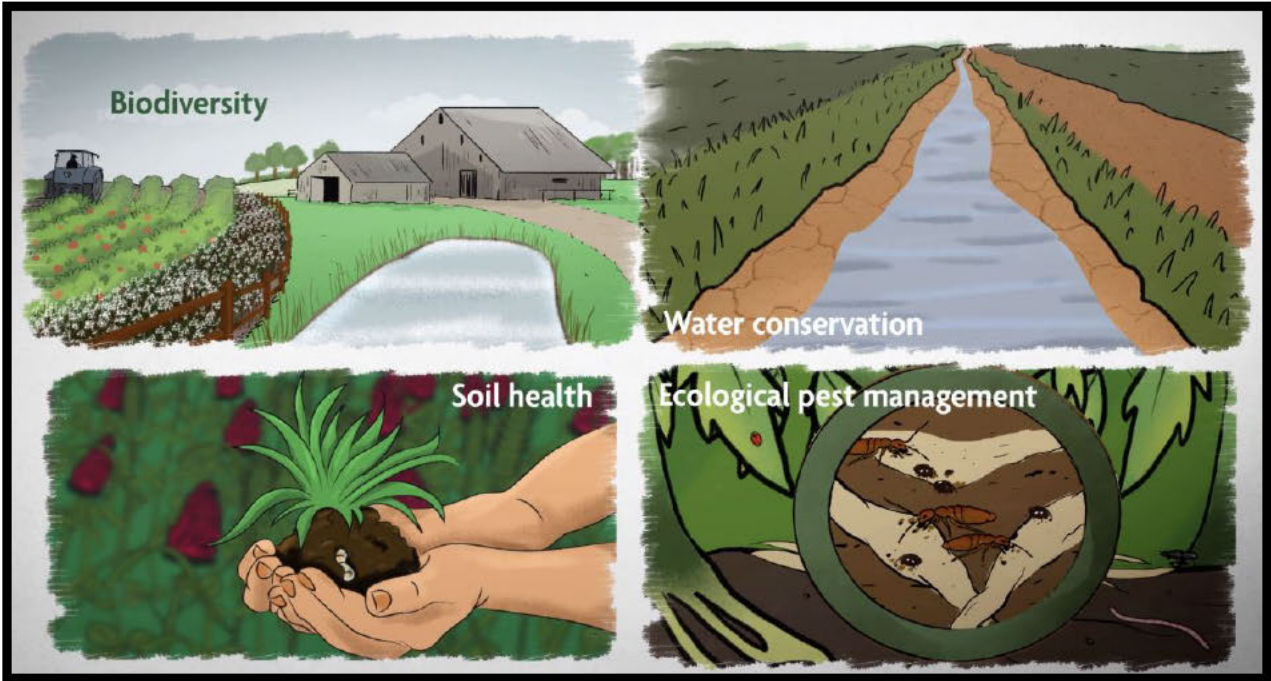
In general, social capital increases the productivity of collective action, and collective action increases social capital. While mutually reinforcing, social capital and collective action can both contribute to long-term sustainability (Saz-Gil et al., 2021). At the individual level, social capital elements like trust and reciprocity rules contribute to the building of reputation – a valuable asset that can help reduce transaction costs in situations when information asymmetry occurs. Similarly, norms and rule-ordered interactions are resources that individuals can use to reduce risks, obtain access to services, accumulate information, and coordinate collective action (Fernandez-Guadaño, Lopez-Millan & Sarria-Pedroza, 2020). As a result, through facilitating transactions between individuals, households, and organisations, social capital has a long-term impact on development. Furthermore, social capital (networking and mutual trust attitudes) provides a platform for any organisation to easily reach collective decisions and take collective action by reducing opportunistic behaviour (Saz-Gil et al., 2021).

Kalogiannidis (2020) point out that cooperatives' commercial structure aids their social consciousness. Theeuwens et al. (2021) assert that they support societal, democratic, and people-centered progress. By allowing individuals to engage in, negotiate with, influence, control, and hold institutions accountable, cooperatives provide people more power over the institutions that affect

their lives. Community members develop empowerment when they work together and learn to trust themselves and their ability to act collectively to improve their own personal situations and the well-being of their community (Zhang et al., 2021). People that work in a cooperative form a sense of community, adopt community rules, learn to trust one another, and agree to give one other advantages. According to Bianchi and Vieta (2020), cooperative development promotes community trust and networks by allowing residents to pool economic, social, and political resources while also gaining access to resources from outside the community.

**3.8.2 Environmental Sustainability**

Environmental sustainability aims to strike a balance between human needs, such as alleviating poverty and addressing inequality, while minimising environmental degradation (Batool, Zhao, Irfan & Żywiołek, 2023). It involves adopting practices that support both the well-being of communities and the preservation of ecosystems, ensuring that natural resources are available for future generations. Bauwens et al. (2020) comes up with a way forward for a fairer community concept of sustainable development which looks after society’s resources. The concept of environmental sustainability underlines that people do not need to cause environment damage or deplete resources that cannot be renewed, whenever they are engaging in their activities to make their lives enjoyable. Looking after environmental health is essential to ensure all generations can enjoy green environment that lead to healthy lives on a healthy planet (Ciruela-Lorenzo et al., 2020).



**Figure 3.5. Environmental sustainability (Source: SARE, 2021:8)**

As a result of the increasing human impact on the environment, global environmental changes are defined by complex and interconnected technical, social, and ecological systems (Todorean et al., 2023). Scientists concur that these worldwide environmental alterations are serious challenges that could have far-reaching economic and environmental consequences for humanity and the planet. People must collaborate to develop cooperative solutions that can help stop further environmental degradation because environmental issues are connected to communal choice concerns on many levels (Ciruela-Lorenzo et al., 2020). People's participation in group-effort-required environmental protection and natural resource management is expected to rise as a result of collective action. Similarly, as mentioned earlier, the adoption and application of collective natural resource management strategies that improve the environmental sustainability of the agricultural community may benefit from the development of social capital through collective action.

Indeed, the benefits of cooperatives in environmental difficulties can be evaluated on an individual as well as a community level. The majority of the time, public landscape, biodiversity, and environmental issues may be addressed collectively. Individual initiatives, on the other hand, can contribute to cooperative action as well as the overall environmental sustainability of their farms, both on the farm and at home (Sare, 2021).

### **3.8.2.1 Environmentally Friendly Practices**

Farm environmental sustainability may be improved by using agricultural cooperatives to incentivise farmers to employ innovative and ecologically friendly farming practices (Aryal et al., 2020). Bareille and Zavalloni (2020) propose that member commitment is influenced by the degree of objective congruence that exists between a multipurpose cooperative and its members. The authors show that changing farming techniques has a tiny but significant influence on the environment. To put it another way, additional activities may help farmers achieve joint economic goals while also increasing the incentives to join the cooperative. A number of studies have also shown the value of cooperative membership in the adoption of innovative technologies and environmentally friendly activities (Iyer-Raniga & Ho, 2020; Saz-Gil et al., 2021). Ciruela-Lorenzo et al. (2020) posit that being a cooperative member, increases the possibility of organic amendment investment. Aryal et al. (2020) assert that the adoption of green management approaches, such as ecological regulation, biological and physical control, and the scientific use of chemical pesticides, is significantly and favorably impacted by cooperative participation. Saz-Gil et al., 2021), concentrating on integrated

pest management technologies, emphasise the importance of cooperative membership in sustainable practices.

According to Saz-Gil et al. (2021), farmers in the Chinese fruit and vegetable sector have some trouble meeting pesticide quality criteria. They show that farmers can reduce pesticide use with the help of cooperative involvement. Chinese cooperatives improve environmental quality by involving themselves in the manufacturing process through quality control and input purchases. As a result, developing countries agricultural cooperatives farmers may be more motivated to improve product quality (Aryal et al., 2020).

Finally, Ciruela-Lorenzo et al. (2020) asserts that the agricultural cooperatives can aid farmers in increasing their productivity and earnings by providing technical assistance and cutting transaction costs, as well as lowering their cost of production and adapting to specific quality needs. According to Moon and Lee (2020), the majority of studies are carried out in developing countries. Based on a study of the literature, they show that joining a cooperative increases agricultural revenue through improving access to inputs and technical expertise (Vuong, Tran, Dang & Mai, 2021; Fernandez-Guadaño et al., 2020). Fernandez-Guadaño et al. (2020) posit that cooperatives may be able to aid farmers in implementing technologies that cut production costs or increase farm output, especially in developing nations. However, if agriculture expands, this could have detrimental environmental consequences. Awoke (2021) demonstrates this in the case of Ethiopian cooperatives aiding farmers in the use of fertilisers, improved crops, and pesticides to increase output, but this may have detrimental environmental implications. In this context, it is even possible to make the case that using chemical pesticides and fertilizers lowers the environmental quality of the items that cooperative members produce.

### **3.8.3 Economic Sustainability**

Lipatova et al. (2021:13) define economic sustainability as “ownership of an economic system to self-replicate in quantitative, structural and qualitative terms”. Basically, this definition put into cognisance of the ability and capacity to reproduce of the prevailing system. Deng, Chen, Zhao and Wang (2021) define economic sustainability in a context of farming environment as the generation of sufficient income from operations to cover production costs which include both variable and fixed costs, all applicable family expenses, and capital replacement expenses. In other words, it is the capacity of the prevailing economic system not to lose its identity. Therefore, handling economic

sustainability will be effective if it is based on an assessment which is reliable and objective (Lipatova et al., 2021). The economic stability is expected in a normal livelihood in order for development to be influenced through both the external and internal environmental factors (Hajian & Kashani, 2021).

In the economics literature, various attempts have been made to define a cooperative as a separate sort of economic organisation (Rapando, Mutukaa & Wamalwa, 2021; Kalogiannidis, 2020). The economic definition of agricultural cooperatives is a point of contention among academics. Economists use theoretical reasoning to build numerous models to examine the economic behaviour of cooperatives. The governance structure, or decision-making process, is often used to distinguish cooperatives from investor-owned businesses (Deng et al., 2021; Vuong et al., 2021). Cooperative members have complete control over the amount and quality of items they deliver to the cooperative. Vuong et al. (2021) assert that, the decision-making process is decentralised, meaning the cooperative has no authority over the quantity supplied by individual farmers. When compared to investor-owned enterprises, decision-making might be characterised as 'centralised,' with cooperatives optimising profits under additional constraints. In the sense that the cooperative must purchase all raw materials delivered by its members, marketing cooperatives can be conceived of as a restricted supply chain (Candemir et al. 2021).

The price paid to farmers is not viewed by cooperatives as a straightforward cost variable. Cooperatives offer higher prices to their members than do investor-owned businesses (Kayongo, Guloba, Muvawala & Ssali, 2022). As a result, cooperatives function as non-profit organisations dedicated to enhancing its members' well-being. Cooperatives optimise member advantages within the constraint of preserving their viability. These viability criteria are referred to as the break-even restriction in the literature (Sandoval, 2020). That is, the cooperative makes a loss in order to fund its production and operational costs. Simultaneously, the competitive yardstick effect, which occurs when cooperatives pay farmers higher prices, may force other businesses to raise the prices of farmers' products (Deng et al., 2021). On the surface, the yardstick effect looks to be beneficial in countering monopolistic power by increasing farm-level prices. Investor-owned enterprises are being driven to raise prices paid to farmers in order to compete with cooperatives.

Cooperative members outperform other farmers who supply through investor-owned enterprises in an imperfectly competitive setting by producing rawer production (Bastardoz and Van Vugt, 2019; Iyer-Raniga & Ho, 2020). Because of their distinctiveness, cooperatives may have an advantage over rivals in oligopolistic markets and eventually take control of the market. Candemir et al. (2021) examine the purchase of inputs in two distinct contexts: a cooperative owned by members and an investor-owned business that aims to maximise profits. The cost structure of farmers determines their variability. When the objectives of the cooperative and its members coincide, the cooperative performs better than the investor-owned company. According to Young's (2019) theoretical model, cooperative members have the option to sell their products on the open market.

In conclusion, agricultural cooperatives can be defined as vertically integrated companies with a member welfare maximisation goal (Kalogiannidis, 2020). Differentiating between traditional vertical integration and agricultural cooperatives is important because farmers may act differently under these two organisational structures. Farmers who vertically combine with businesses owned by investors are viewed as employees and have less motivation to raise the caliber of their output (Candemir et al., 2021). With asymmetric knowledge, incentives may be even weaker due to the principle-agent problem. Kayongo et al. (2022) argues that farmers' economic incentives for quality-improvement innovations can, however, be retained in the event of vertical integration through cooperatives. Farmers who wish to improve product quality may be more likely in agriculture cooperative specifically. As a result, joining an agricultural cooperative makes it easier to coordinate vertically in the adoption of new farm-level technologies.

### **3.8.3.1 The Economic Function of Cooperatives**

The economic performance of members can be significantly influenced by their participation in cooperatives, particularly in the context of developing countries. Numerous empirical studies conducted in these countries have focused on examining the effects of farmers' cooperative membership on farm productivity and income (Lipatova et al., 2021; Afanaseva, Elmov, Ivanov & Makushev, 2021; Kayongo et al., 2022). These studies underscore the long-term economic benefits for members who join cooperatives. It is worth noting that the impact of cooperative membership varies depending on the farm size. Afanaseva et al. (2021) and Vuong et al. (2021) suggest that the impact of cooperative membership on agricultural revenue is more significant for small-scale farms. According to Manda et al. (2020), small-scale farmers benefit from joining a cooperative either because they lack negotiation leverage or because the opportunity cost is too low. They also claim

that belonging to a cooperative benefits large-scale farmers by allowing them to take advantage of processing and marketing scale economies. This effect was demonstrated by Manda et al. (2020), who discovered that cooperatives have a greater positive impact on agricultural revenue for larger farms. According to Joshi, Sharma and Singh (2020), cooperative participation has a positive impact on farm employment for cooperative members. Shangase (2022) investigates how women smallholders can improve their economic outcomes by joining a cooperative. They claim that being a member of a cooperative increases the market price and quantity of honey produced by these ladies. However, as a result of their engagement, they are unable to increase their market power. Kayongo et al. (2022) argue that cooperatives have a broader economic impact in industrialised countries, including yardstick effects on non-members and a mixed effect on quality, as quality standards are higher everywhere.

Lipatova et al. (2021) suggest that cooperatives that focus on quality distinction may minimise the marginal cost of innovation, making these strategies more accessible to other enterprises. Miller (2021) looks into the effects of forming an agricultural cooperative in the salmon fisheries of Alaska. They concluded that the founding of the cooperative increased the prices paid to local fishermen. In addition, the new fishing production system was adopted by the cooperative's competitors, investor-owned firms. By lowering the cost of innovation for farmers who are not members, cooperatives may make it easier to improve quality throughout the supply chain. Saz-Gil et al. (2021) discover that in the poultry industry, producers who deliver to the cooperative have higher quality performance on average. With the help of cooperatives, farmers may be able to deal with market imperfections. This is especially true in developing countries, where farmer participation in cooperatives increases their chances of benefiting from global markets.

If farmers have the chance to export, they may be incentivised to engage in quality enhancement through product diversification. Manda et al. (2020) posit that cooperatives have the potential to give farmers more dependable contracts and better rates by giving them access to larger national and worldwide marketplaces of superior quality. Moon and Lee (2020) assert that cooperatives have a number of choices for informing consumers about the quality of their products. They are capable of creating their own brands. Cooperatives may be able to differentiate their products for consumers who have favourable perceptions of cooperative products.

However, possible organisational flaws in cooperatives may have a negative impact on overall product quality. Firoznia et al. (2021) indicate that cooperatives create worse product quality than investor-owned enterprises in the empirical phase of their study on quality choice in the Austrian wine sector. Based on data from the Austrian wine market from 2004 to 2007, they discovered that wine quality in cooperatives is significantly worse than in investor-owned firms. According to the authors, the product quality free riding dilemma, in which cooperative members who profit from quality rents cheat on product quality, may undercut farmers' motivation to enhance product quality. Another argument is that in the Austrian wine industry, cooperatives are far larger than investor-owned companies. Furthermore, one of the most major impediments to adoption that farmers face is asymmetric knowledge (Chavas & Nauges, 2020). Farmers have a hard time predicting the financial benefits of new practices. Despite this, cooperatives can assist members in adopting environmentally friendly behaviours.

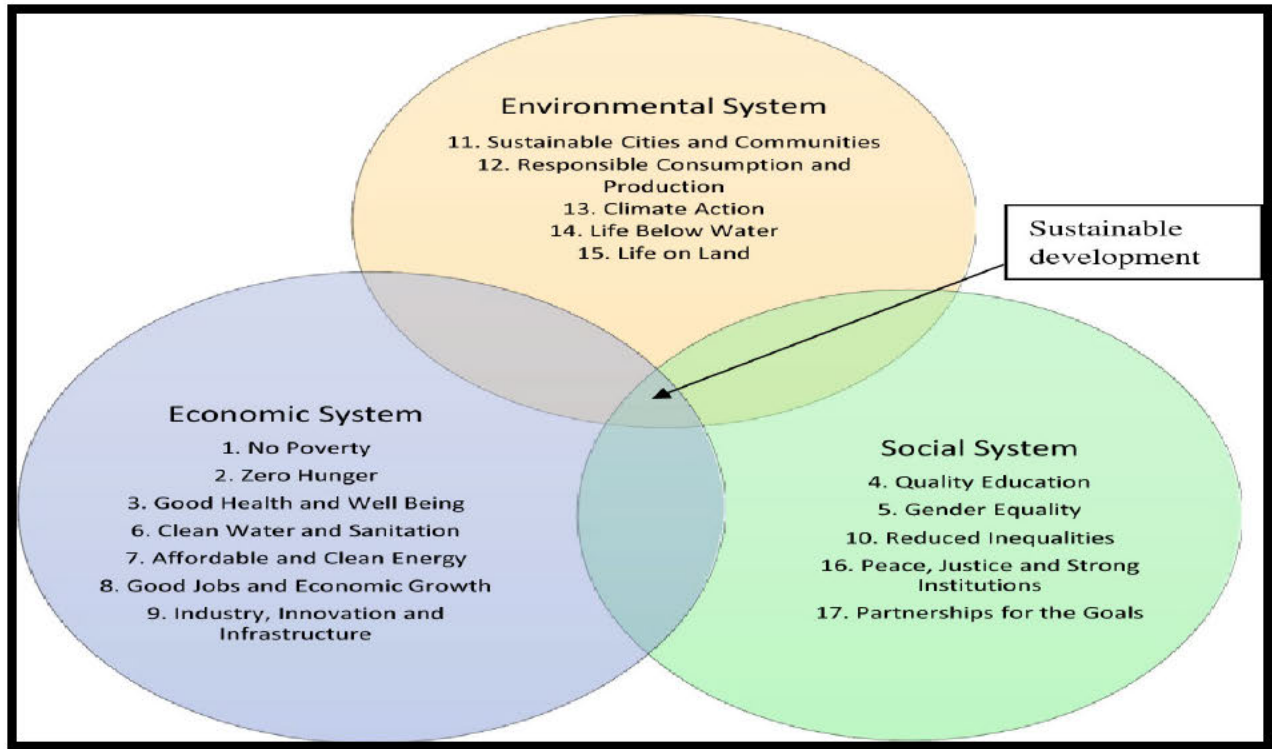
### **3.9 The Sustainable Development Goals (SDGs)**

This section aims to establish a connection between the 17 SDGs, which were officially endorsed by the UN in 2015, and the systems approach to sustainability. According to Barbier and Burgess (2021), the systems approach conceptualises sustainable development as the meeting point of the objectives associated with the economic, environmental (or ecological), and social systems. Therefore, system approach to sustainability involves understanding and addressing the interconnections and interdependencies between environmental, social, and economic systems to achieve long-term ecological balance, social well-being, and economic prosperity. In 2015, the UN General Assembly established 17 Sustainable Development Goals. These goals seek to provide realistic benchmarks for a 2030 agenda for sustainable development. "Over the next 15 years, the goals and targets will stimulate action in areas of critical importance for humanity and the planet" (UN 2015:n.p).



**Figure 3.6. Sustainable Development Goals (Source: UN, 2015 n.p)**

Barbier and Burgess (2021) opine that the UN's SDG strategy makes sense in the context of the systems approach to sustainable development. First, the 2030 agenda highlights how interconnected the SDGs are and how important it is to integrate all 17 goals in order to achieve sustainable development. Second, any SDG can be defined as a goal that is largely related to the social, economic, or environmental systems. Koptina (2020) contends, however, that the creation of the new goals was viewed by many as an ambitious task because they aim to be universal, meaning that they apply to all nations, not just developing ones, and because they must provide guidance for the challenging transition to sustainable development, which has eluded the international community since the Earth Summit in 1992.



**Figure 3.7. The systems approach to sustainability applied to the 17 SDGs (Source: Barbier & Burgess, 2021:38)**

Milton Friedman famously said, ‘one of the great mistakes is to judge policies and programs by their intentions rather than their results’. The 17 Sustainable Development Goals (SDGs) of Agenda 2030 are intended to reduce poverty, promote socioeconomic inclusion, and safeguard the environment (UN, 2015). A worldwide to-do list for sustainable development, it has drawn criticism for being very broad, universal, ambitious, and possibly inconsistent, especially when it comes to the goals of environmental sustainability and socioeconomic development (UN SDSN, 2015; Barbier & Burgess, 2021). These difficulties resemble a labyrinth of conceptual and quantitative issues, and determining a sustainable development metric and its impact is a difficult task.

Oana and Rakhyun (2020) argue that the concept of sustainable development seems highly relevant given the increasing demands placed on the planet's finite resources by humankind. For millennia, national priorities have revolved around economic growth. The stability and resilience of ecosystems have resulted in the depletion and degradation of natural capital, which is why discussions on ecological issues have only recently spread throughout the globe (Kopnina, 2020). This became an issue when the environment began to express her outrage through droughts, famines, loss of

biodiversity, global warming, climate change, and increased pollution. The first indications of nature's fury, injustice, and unsustainability have really called into question the growth theories that result in patterns of production and consumption that are not sustainable. Calero et al. (2022) claim that the emphasis on economic growth has shifted away from welfare and well-being to material prosperity, which is the ultimate goal for vast swaths of humanity. The largest informational failure is best summed up by growth measures such as gross domestic product (GDP), which mask the costs of economic activities on natural resources. Natural calamities caused by humans are now the current generation's destiny.

Calero et al. (2022) posit that the limits of nature are raising concerns about the viability of the current economic trajectory and pointing the way toward the adoption of policies that will both preserve and renew Mother Earth while halting the loss of natural resources. Instead of producing the desired effects, the reliance on palliative measures has driven the economies into ecological overshoot. Mthembu and Nhamo (2021) observe that the current challenges of managing an economy's growth in order to offer a reasonable quality of life for its people while simultaneously protecting and monitoring environmental health compelled the UN to make a drive toward making the globe a better place. In order to guarantee food, education, health, and environmental sustainability, 189-member nations pledged in 2000 to accomplish the Eight Millennium Development Goals by 2015. This would make the world equal, sustainable, and prosperous. Since the goals could not be achieved by 2015, the UN changed its focus to the largest set of 17 goals for the benefit of people and the planet in 2016, known as the SDGs, which are expected to be completed by 2030 (UNDP, 2016).

### **3.10 Enhancing Sustainable Development through SDGs**

Although everyone wants to attain sustainable development, it is a very difficult concept to do so (Mahardika, 2021). In addition to meeting immediate demands, sustainable development should promote long-term ecological sustainability. Sustainable development, though has been defined in varied ways by different authors, Oana and Rakhyun (2020:1270) define it as “enhancement of human wellbeing considering the carrying capacity of the planet.” Calero et al. (2022) suggest that the concept of sustainability has become so complex that its essence has been lost and has failed in guiding the policy matters.

Sustainable development aims to prioritise human well-being while staying within ecological limits, implying that global SDGs should align with planetary boundaries. Oana and Rakhyun (2020) study

examines if SDGs enhance human well-being (measured by Human development index (HDI)) while considering the planet's carrying capacity (measured by EF). HDI reflects social development, and socially progressive countries tend to have higher knowledge, health, and living standards. While HDI may not capture all complexities of SDGs, it can still impact quality of life. Achieving sustainable development necessitates considering ecology, as neglecting it hinders sustainability (Kopnina, 2020). Human pressure on biodiversity, measured by EF, exceeds sustainable limits, emphasising the urgency of addressing this issue.

### **3.11 SDGs and Government Policies**

Kopnina (2020) argues that what is urgently needed is a new economic model that takes into account the basic requirements of the population as a whole rather than emphasising consumption that never stops. In addition, the community approach will support the achievement of the SDGs, which call for increased individual autonomy and independence as well as the development of individual capacity to come up with creative solutions. Decision makers should support the community approach in order to fulfill the promise of sustainable development (Calero et al., 2022). Several excruciating chemotherapies will be necessary to achieve all 17 SDGs if sustainable development is to be realised by 2030. Oana and Rakhyun (2020) suggest that markets cannot determine prices that consider negative externalities and resource depletion without societal approval and political will.

The SDGs have received praise from all around the world for being indivisible and interconnected, but they have also drawn criticism for being illogical. In their arguments, critics have hinted that there is a risk that, despite successes toward specific objectives, the ultimate goal of sustainability may not be attained (Mthembu & Nhamo, 2021). In addition, the non-hierarchical structure of the SDGs is viewed as problematic since it is difficult for nations to determine which SDGs, given their limited resources, should receive more attention because of the interdependence of the goals and targets. According to Calero et al. (2022), some target sets are complementary or interdependent, while other targets might negatively impact other sets. For example, SDG 2's emphasis on ensuring food security may have a negative effect on SDG 6's goals of sustainable water management and availability. For this reason, some of the SDGs and targets are more likely to compete for little resources or even shift rather than provide solutions in a setting where resources are sparse (Horsefall & Umah, 2022). According to Forestier and Kim (2020), prioritisation may need to occur during implementation due to competition for resources. The current patterns of human development must be substantially within the earth's ecological capability in order to ensure sustainable development

across national boundaries. Every SDG subgoal should be accomplished in a way that is environmentally sustainable according to the architecture of the SDG framework.

### **3.12 Domestication of SDGs**

According to Mthembu and Nhamo (2021), domestication is the process through which a nation implements an international agreement it has approved into national policy. This usually happens after a process of negotiation within a domestic setting, especially at the national and provincial levels. The term "localisation" has been used by Tsalis et al. (2020) to refer to the same process. Nonetheless, since localisation is typically associated with SDG implementation and processes at the local level, this study chose to refer to it as domestication (Kumar et al., 2021).

Developing countries are actively responding to the SDGs, which have a significant influence on their domestic development policies and responses (Tsalis et al., 2020). The focus is now shifting to understanding the real meaning and impact of the SDGs on ordinary citizens at the national level. Although the SDGs are considered soft law and not legally binding, they have garnered widespread participation and deep commitment due to their flexible nature (Kumar et al., 2021). With the adoption of the 2030 Agenda, the emphasis has turned to implementing the goals. However, the specific arrangements for domestic implementation were not extensively detailed, primarily due to considerations of sovereignty and the comprehensive nature of the 2030 Agenda (Fonseca et al., 2020). This made it impractical to prescribe precise implementation processes and responsibilities.

The process of domesticating international commitments, such as the SDGs, is crucial for their legitimacy and implementation at the national level. Tsalis et al. (2020) posit that domestication involves incorporating global policies into the national framework while considering local conditions and stakeholders. It transforms external models into familiar and integrated policies. However, domestication is not merely a technical exercise; it is primarily a political process (Mthembu & Nhamo, 2021). While the flexibility of the SDGs is welcomed, challenges arise from the lack of clear implementation guidelines. Institutional dynamics, both national and international, influence the domestication of the SDGs (Fonseca et al., 2020). National institutions may face limitations in capability and capacity, which can hinder ambitious goals. Countries need to avoid over-commitment and ensure equitable delivery of the SDGs. Additionally, Fonseca et al. (2020) content that the broad nature of the SDG agenda and overlapping goals complicate the assignment of responsibilities. Weak leadership may contribute to contestations and tensions among institutions.

Different institutions, both national and international, may have varying interests and priorities when it comes to the dimensions of sustainability, leading to power struggles and contestations. These dynamics can affect the domestication and implementation of the SDGs within national governments (Mahardika, 2021). At the international level, organisations may also try to influence the domestication process to serve their own narrow interests, potentially conflicting with national interests. Mthembu and Nhamo (2021) claim that Uganda, South Africa and Rwanda have been leaders in domesticating the SDGs in Africa. In South Africa, cooperatives are seen as crucial for empowering the previously disadvantaged black majority, making it important to evaluate their impact on the sustainability of rural livelihoods.

### **3.13 Chapter Summary**

This chapter presented a comprehensive review of sustainable livelihoods, highlighting the significance of considering individuals' and communities' holistic well-being in achieving sustainable development. The sustainable livelihood strategy was examined, which focuses on improving livelihood capacities and opportunities while taking into account social, economic, and environmental factors. Theoretical frameworks for understanding sustainable livelihoods were explored, including the sustainable livelihood framework, which emphasises the interconnection of various components such as natural, human, social, physical, and financial capital. The chapter also looked at the connections between sustainable livelihoods and the SDGs, emphasising how the pursuit of sustainable livelihoods fits into the larger global agenda for equitable and sustainable development. The SDGs provide a framework for addressing poverty, inequality, environmental degradation, and promoting social well-being, all of which are critical to creating sustainable livelihoods. The next chapter examines the research design and methodology.

## **CHAPTER FOUR: RESEARCH DESIGN AND METHODOLOGY**

### **4.1. Introduction**

This chapter outlines the research methodology employed to investigate the influence of agricultural cooperatives on the sustainability of rural livelihoods in KZN province, South Africa. The selection of appropriate research methods is crucial to ensuring accurate study outcomes, influencing elements such as research design, study population, sampling methodology, research instruments, and statistical tools for data analysis. The chapter covers research approaches, instruments, sampling techniques, data collection, processing, and analysis methods. A thorough literature review on research methodology aided in understanding the strengths and limitations of various approaches, facilitating the alignment of methodologies with study objectives and questions. This chapter also presents a refined articulation of research aims and questions based on the chosen methodologies.

### **4.2. Research Objectives**

The broad aim of this study was to explore the influence of agricultural cooperatives on the sustainability of rural livelihoods and determine how best agricultural cooperatives can contribute towards the sustainability of rural communities' livelihoods. The specific objectives of the study are highlighted below:

- i) To establish the influence of agricultural cooperatives on rural livelihoods in respect of environmental sustainability.
- ii) To establish the influence of agricultural cooperatives on rural livelihoods in regards to social sustainability.
- iii) To establish the influence of agricultural cooperatives on rural livelihoods in respect of economic sustainability.
- iv) To identify the challenges faced by agricultural cooperatives in KZN, South Africa, and assess their influence on the sustainability of rural livelihoods.
- v) To provide recommendations for enhancing the agricultural cooperatives on the sustainability of rural livelihoods in KZN.

### **4.3 Research questions**

Following from the objectives of this study, the following questions were raised:

- i) What is the influence of agricultural cooperatives on rural livelihoods in respect of environmental sustainability?

- ii) What is the influence of agricultural cooperatives on rural livelihoods in respect of social sustainability?
- iii) What is the influence of agricultural cooperatives on rural livelihoods in regards to economic sustainability?
- iv) What are the challenges experienced by agricultural cooperatives in KZN, South Africa, and how do these challenges impact the sustainability of rural livelihoods in the region?
- v) What recommendations can be proposed to enhance the agricultural cooperatives on the sustainability of rural livelihoods in KZN, South Africa?

According to Vindrola-Padros and Johnson (2020), research entails the use of a variety of methodologies and techniques to generate scientific information through the use of objective methods and procedures.

#### **4.4 Research Design**

A research design serves as a comprehensive plan for conducting an investigation, encompassing philosophical perspectives, inquiry strategies, and specific methodologies (Kumatongo & Muzata, 2021). It outlines the procedural details of the study, including data collection methods, timing, and the target population (Kurten, Brimmel, Klein & Hutter, 2022). The choice of research design and methodology is driven by the research topic or issue under investigation (Kumatongo & Muzata, 2021). Research design acts as a central framework that connects theoretical research questions with practical empirical research, providing explicit guidelines for conducting the study (Kimmons, 2022). Following a systematic protocol is essential for achieving the study's objectives before embarking on data collection and analysis stages.

To obtain cost-effective and precise answers to research questions, it is crucial to translate the research problem into analysable data. A research design can be defined as a carefully devised plan, structure, and strategic approach aimed at uncovering answers to research questions while ensuring optimal control of variables (Kimmons, 2022). The research strategy guides the identification of appropriate analysis techniques to achieve the desired outcomes. It specifies the necessary information, its collection and analysis methods, and how it directly addresses the research questions. Neglecting the elements that influence the study design and the data requirements can lead to weak and unconvincing findings, ultimately hindering the achievement of research objectives (Kumatongo & Muzata, 2021).

For research to yield meaningful results and relevant recommendations, the research design should incorporate a method for interpreting the collected data, allowing the researcher to draw insightful implications from the study. Three primary research designs exist: quantitative, qualitative, and mixed (Bhatt, 2020). The choice of design should align with the specific research topic at hand. Therefore, choosing the right design for a particular study or inquiry is crucial (Dawadi, Shrestha & Giri, 2021). Regarding its techniques and study strategies, every research methodology is distinct. Research methods relate to the manner in which data are gathered, examined, and evaluated, whereas research design is the overall approach the researcher takes to propose a solution to the issue addressed in order to achieve the study objective (Faems, 2020). The qualitative method was used in this investigation.

#### **4.4.1 Quantitative Research Design**

The main objective of a quantitative research design is to control the relationship that exists between an independent variable and a dependent (or consequence) variable within a population. According to Duckett (2021), this study design is either experimental or descriptive. The goals of a quantitative research approach include fact-finding, hypothesis testing, establishing correlations between variables, and predicting outcomes. Mohajan (2020) asserts that quantitative research is an objective type of study in which knowledge is demonstrated via scientific procedures rather than through subjective interpretations, sentiments, or values. To ensure impartiality, generalisability, and reliability, quantitative researchers employ techniques from the natural sciences (Kumatongo & Muzata, 2021). A preconceived hypothesis about potential links between the variables is tested using statistical methods. The toolkit for quantitative researchers includes survey, correlational, comparative, causal, and experimental designs. It is also accurate to state that there are two main types of quantitative designs: non-experimental designs and experimental designs.

##### **4.4.1.1 Experimental Designs**

The goal of experimental research is to determine whether and how a particular treatment affects a specific outcome (Kumatongo & Muzata, 2021). Experimental research can involve true experiments, quasi-experiments, or single case studies. The latter is rarely used in educational research due to its narrow focus. However, because single-subject studies have a long and reputable history in empirical research, particularly in psychology, they can be compared to true experiments (Duckett, 2021). Mohajan (2020) suggests that the most basic experimental design is a two-group posttest-only strategy, which works well for determining causal links. In this design, an experimental

group and a control group are created randomly, through selection, or through matching. After the treatment (which is given only to the experimental group), the two groups are compared. Pretest-posttest procedures are used in two-group designs, where participants are randomly assigned to form the two groups. Only the experimental group receives the treatment, and both groups undergo pretest and posttest assessments.

Although external validity in experimental studies may be compromised by respondents' awareness of being examined, internal validity is closely monitored (Mohajan, 2020). When conducting experiments with human subjects and control groups, care should be exercised. While the benefit given to the treatment group shouldn't disadvantage the untreated group, the harm done to one group receiving the treatment could be unethical and irreversible. Researchers must be aware of the potential consequences when using such designs and should plan interventions where necessary.

#### **4.4.1.2 Non Experimental Designs**

Due to their abstract nature and ethical constraints, non-experimental investigations do not involve the experimenter manipulating the independent variable. For example, characteristics such as age, gender, and ethnicity cannot be controlled (Duckett, 2021). As a result, it is the researcher's responsibility to observe and analyse what is seen. Non-experimental research designs include surveys, causal-comparative, correlational, ex post facto, and descriptive designs (Haas & Hadjar, 2020). a) Through descriptive research, information regarding current circumstances, events, and conditions can be gathered. b) The goal of causal-comparative research is to determine potential causal linkages between the variables under investigation by examining their relationship. c) The goal of correlational research is to identify potential links between variables, not always existing ones. d) Ex post facto research: The term "from what is done afterwards" refers to ex post facto research. It starts with the result and works its way back to potential causes. Questions concerning the effect will always come up after the cause, or the other way around. Since the researcher cannot control the variables in ex post facto research, it is implied that the researcher's duty is restricted to reporting what occurs or the result of an action. e) Surveys: According to Mohajan (2020), a survey is a systematic method to collect data from a sample of entities to create quantitative descriptors of the characteristics of the broader population. Surveys gather information about public attitudes, behaviors, opinions, and beliefs that cannot be immediately observed (Duckett, 2021). By examining a sample of a population, surveys enable researchers to quantitatively or numerically describe trends, attitudes, or opinions. These studies can be cross-sectional or longitudinal, collecting data through

structured interviews or questionnaires, with the aim of extrapolating findings from the sample to the broader population (Dawadi et al., 2021). Kumatongo and Muzata (2021), identified three characteristics of survey research: a) data collected from participants in a survey is subjective; b) a selected subset of the population is used in a survey research from which the findings can later be generalised back to the population; c) Survey designs are used to quantitatively describe specific aspects of a given population, which may involve examining the relationships among variables. This research design was not used in the current study on the influence of agricultural cooperative on the sustainability of rural livelihood in KwaZulu-Natal, province.

#### **4.4.2 Qualitative Research Design**

Qualitative research aims to explore and comprehend the meaning and significance that individuals or groups attach to social or human events (Busetto, Wick & Gumbinger, 2020). Grounded in disciplines such as anthropology, sociology, humanities, and evaluation, qualitative research generates non-quantifiable data through open-ended research questions. By examining unique contexts and understanding the subjective interpretations of participants, this approach seeks to give purpose and meaning to their ideas and experiences of reality (Vindrola-Padros & Johnson, 2020). Qualitative research embraces the notion that reality is socially constructed, interconnected, and challenging to quantify, emphasising the importance of subjectivity and insider perspectives (Bhatt, 2020). It values diversity, culture, and social justice, offering up-to-date and diverse information. Data collection methods commonly employed in qualitative research include participant observation, interviews, and immersion in the research setting.

The essence of qualitative research lies in its focus on the social aspects of scientific inquiry. Researchers employ semi-structured interviews and open-ended questions to gather data using qualitative techniques, often conducting interviews in relaxed settings such as participants' homes or conference rooms (Vu, 2021). Qualitative research is particularly suitable when the subject is poorly understood and there is a need to gain comprehensive insights. Participant interviews generate rich narratives that are analysed to address the research question. Multiple inquiries are made to ensure a thorough understanding of the issue and to seek potential solutions (Busetto et al., 2020). Qualitative research employs various data gathering techniques, including observations and interviews, to deepen the understanding of the subject matter (Busetto et al., 2020). It offers flexibility, evolving with the acquisition of new data, and providing a holistic picture of the topic while allowing researchers to immerse themselves fully in the inquiry. The researcher serves as the research

instrument, and the study's direction is shaped by ongoing data analysis. A well-prepared qualitative research study considers the appropriate research design, time needed to complete the study, data collection strategies, and available resources.

Furthermore, researchers must critically examine any biases or assumptions they may hold regarding the research topic (Vu, 2021). Sample selection in qualitative research involves identifying participants with direct experience or exposure to the research topic. Interviews reveal valuable insights into participants' interactions with the research subject or phenomenon. While sample sizes tend to be small, the extensive narrative material enables the identification of significant trends beyond statistical findings (Norris, 2020; Busetto et al., 2020). This research design was chosen in this study to gain an in-depth understanding of the issues within their unique context.

While research design refers to the overall strategy the researcher uses to suggest a solution to the problem addressed to meet the study aim, research techniques are concerned with the ways in which data are collected, analysed, and evaluated (Bhatt, 2020). The researcher employed the qualitative method in this study.

#### **4.4.3 Mixed Research Designs**

Often referred to as the "third methodological orientation," mixed methods research combines the best features of qualitative and quantitative research approaches (Kimmons, 2022). In a single study or program of inquiry, an investigator uses both qualitative and quantitative methods to gather and analyse data, integrate findings, and draw conclusions (Dawadi et al., 2021). This approach suggests that researchers are not limited to a narrow range of conventional research methods (Vu, 2021). Methodological triangulation, or pluralism, is the application of mixed research designs or techniques, with roots in social science from the 1950s onward (Vindrola-Padros & Johnson, 2020).

The purpose of using mixed research methods is data corroboration. As a result, qualitative data is used to confirm and validate data obtained through quantitative methods, and vice versa (Vu, 2021). Conclusions should only be made when both data sets demonstrate mutual support. In cases where the data sets do not support one another, generalisations may be affected. Researchers using mixed methods need to be proficient in both qualitative and quantitative processes, from data collection to analysis and conclusion drawing (Bhatt, 2020). Using mixed approaches enhances data reliability. For example, an analysis of the frequency of teenage pregnancies can provide detailed explanations

for these occurrences. There is no need to delay research on pregnancies for later stages, as data can be gathered simultaneously depending on the mixed method design selected. A researcher can choose from a variety of mixed method design options, including nested designs, explanatory sequential designs, convergent designs, and exploratory sequential designs.

Kimmons (2022) identified three fundamental mixed-method designs: exploratory sequential design, explanatory sequential design, and convergent design. Mixed methods can use both concurrent and sequential structures. Concurrent mixed methods research strategies involve collecting both qualitative and quantitative data simultaneously, while sequential designs typically involve multiple phases of data collection, using either qualitative or quantitative methods first (Haas & Hadjar, 2020; Vindrola-Padros & Johnson, 2020). Convergent designs refer to mixed research designs where the investigator simultaneously gathers both quantitative and qualitative data (Vu, 2021). Although the two data sets are analysed independently, their findings are often integrated during data interpretation (Haas & Hadjar, 2020; Bhatt, 2020). Convergent designs help researchers evaluate multiple layers within a system, confirm results across methodologies, and gain a more comprehensive understanding by combining two databases (Bhatt, 2020). However, this research design was not used in the current study on the influence of agricultural cooperatives on the sustainability of rural livelihoods in KwaZulu-Natal province.

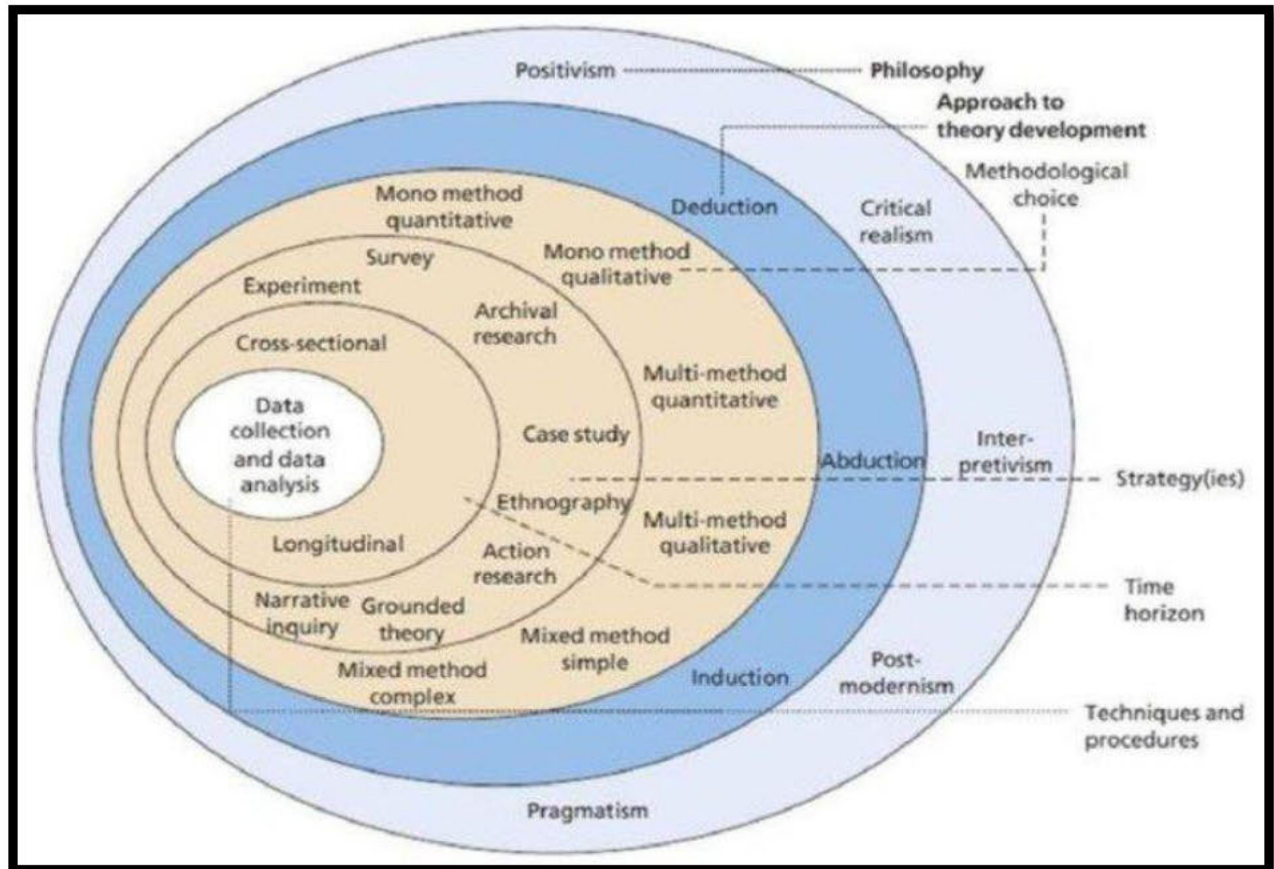
#### **4.4.4 Research Design Adopted for the Study**

The researcher adopted a qualitative research design for the study on the influence of agricultural cooperatives on the sustainability of rural livelihoods in KwaZulu-Natal province. Qualitative research enabled a deep understanding of the lived experiences and subjective interpretations of participants (Vindrola-Padros & Johnson, 2020). This approach was essential in capturing the complexity of social contexts, such as those in rural communities. Additionally, qualitative methods allowed for flexible data collection techniques, including interviews and participant observations, which provided rich, descriptive data on individuals' experiences and perceptions (Busetto et al., 2020). Lastly, the design aligned with the study's goal of exploring the meaning cooperative members attributed to their participation and its effects on their livelihoods, making it a suitable choice for this investigation (Rahman, 2020).

#### **4.5. Research Philosophies**

Research philosophy refers to the activities that researchers undertake when conducting research since they deal with the creation and nature of knowledge (Muhaise et al., 2020). It is guided by

specific presumptions about how the researcher sees the world. Mkansi and Mkalipi (2023) state that philosophical questions should be considered in research in order to avoid producing subpar results. While an item is used in natural or scientific investigation, a construct or phenomenon is used in management/social science research (Mauthner, 2020). In keeping with the research 'onion' of Saunders et al. (2016), this study talks about research philosophies. This is shown in figure 4.1 below:



**Figure 4.1. Research onion (Source: Saunders et al., 2016:119).**

#### 4.5.1 Realism

According to Saunders et al. (2016), realism is another another philosophical viewpoint connected to scientific inquiry. The fundamental tenet of realism is that what our senses reveal to us as reality—that things exist independently of human thought—is actually reality. Realists believe that reality exists that is mostly independent of the mind. In this way, idealism—the view that the only things that exist are the mind and its contents—stands in contrast to realism. Positivism and realism are both branches of epistemology that take a scientific approach to the growth of knowledge (Mkansi & Mkalipi, 2023). This presumption serves as the foundation for both data gathering and data interpretation. It is easier to understand this meaning (and, in particular, the relevance of realism for

business and management research) when two types of realism are contrasted. As a result, two varieties of realism emerged: direct and critical realism. The application of appropriate methodologies will promote knowledge progress on a certain phenomenon, according to empirical/direct realism (Kirongo & Odoyo, 2020). Direct realism is concerned with social actors' perception of the world through their senses in order to create a true image of the world (Gannon, Taheri & Azer, 2022). This may not be completely acceptable in corporate research, but because of its objectivity, it is appropriate in natural science.

This debate led to the development of the second realism, critical realism. Critical realism, as its name implies, asks whether a social actor's impressions of the world are accurate. Critical realism's central concept is that reality exists independently of the human intellect (Kirongo & Odoyo, 2020; Saliya, 2023). It gives examples of human senses deceiving social actors, resulting in a distorted view of the world. Depending on the circumstances or scenario, social players have varied perspectives. Critical realism maintains that human understanding of reality is built on shared training and that it cannot be expected if the actors are not involved in the learning process (Mauthner, 2020). This suggests that reality exists regardless of one's understanding of it; reality can thus be known or unknown. According to direct realism, the world is generally steady based on the orientation of what people see and what they get. Critical realism, on the other hand, contends that the corporate world is rapidly changing, making it hard to know what people see is what they receive. Mkansi and Mkalipi (2023) posit that due to shifting and incorrect views of what appears to be the right reality, what you see may not transfer to what you get in this context. This explains why certain business scholars, particularly in the fields of marketing (investigating consumer behavior) and organisational behavior, are subjective. The researcher does not employ this philosophy, which is a scientific and quantitative approach, since this study is a qualitative one.

#### **4.5.2 Positivism**

Positivism is a research philosophy that holds the view that truth and reality exist independently of the researcher, and that the world can be objectively known and studied (Horne, 2021). Positivists approach research in a manner similar to natural scientists, seeking to define and analyse reality as an external entity. Ahlskog (2020) opines that positivists believe that knowledge is derived from visible and measurable objects, which can be generalised as real knowledge. Positivism is often associated with quantitative research methods, aiming for objectivity and generalisability of findings.

It assumes that social phenomena and their interpretations have a separate reality from the researchers or actors involved (Kirongo & Odoyo, 2020).

The researcher in this qualitative study did not employ positivist research methods or techniques. Positivism is associated with a quantitative approach, which aims for objectivity, generalisability, and the use of structured and objective techniques such as large-scale surveys and quantitative data analysis. However, in this study, the researcher adopted a qualitative research design, which involves gathering rich narrative data through methods like interviews and observations. The focus was on understanding the unique context and meanings attributed by participants, rather than seeking generalisable findings through quantitative analysis. Therefore, the researcher did not utilise positivism in this qualitative study.

#### **4.5.3 Pragmatism**

Pragmatism, as a research philosophy, differs from other paradigms by focusing on actions, situations, and consequences rather than the pursuit of absolute truth and reality (Gannon et al., 2022). It advocates for the use of diverse methodologies to address research problems and concerns, emphasising practical implications and efficiency. Saliya (2023) argues that pragmatists believe that truth is determined by practical success and encourage the adoption of a combination of approaches and procedures to achieve better research outcomes. The pragmatic worldview recognises the diversity of the world and the need for multiple perspectives and methods to gain a deeper understanding of complex phenomena.

Pragmatic inquiry places a strong emphasis on practical knowledge and acknowledges the interdependence of experience, knowing, acting, and inquiry as an experimental process (Panya & Nyarwath, 2022). Researchers are encouraged to employ various data collection and analysis strategies to overcome the limitations of relying on a single method. The goal is to generate useful and practical knowledge that addresses real-world challenges. The flexibility of the pragmatic approach allows for multiple perspectives, methodologies, and assumptions, leading to more robust data collection, analysis, and interpretation of findings (Muhaise et al., 2020). It enables researchers to engage with different experiences of the same phenomenon and guides the research towards problem-solving.

In spite of the compatibility of pragmatism philosophy with qualitative studies, the researcher chose not to adopt this approach in the current study, as it did not align with the study's primary focus on action and practical knowledge. Since the research objectives did not involve an emphasis on practical implications or the exploration of actions, an alternative philosophical perspective was selected to better suit the specific aims and scope of the study.

#### **4.5.4 Interpretivism**

Interpretivism emphasises the researcher's understanding of how individuals differ in order to effectively assume the role of social actors in research (Saliya, 2023). In this context, the concept of "social actors" is significant, drawing on a theater metaphor where individuals have roles to play in the drama of human life. People interpret common social roles based on the meanings they assign to them, and they also attribute their own meanings to the roles played by others (Bergmann, 2023). The foundations of interpretivism lie in phenomenology, which explores how social actors perceive the world, and symbolic interactionism, which focuses on the ongoing interpretation and understanding of the world through actions and interactions (Gannon et al., 2022). Interpretivism research generates contextually situated understandings rather than universally applicable theories or laws.

Interpretivism serves as a viable alternative to positivism in natural sciences research, particularly in social and management sciences, as it emphasises reducing the gap between the researcher and the subject of the research, both being social actors (Bergmann, 2023). Adopting an interpretivist approach allows for a deeper comprehension of the social phenomena under investigation, ensuring that the researcher's perspective does not dominate or bias the interpretation and discussion of study findings. However, Interpretivism faces challenges related to reliability, validity, and generalisation, as it rejects yes/no responses and quantification, instead focusing on descriptions and participant quotes (Saliya, 2023).

In this qualitative study, the researcher adopted the philosophy of interpretivism, which recognises the existence of socially constructed multiple realities in the world. By embracing interpretivism, the researcher acknowledges that individuals assign meanings and interpretations to social phenomena, and these subjective perspectives shape their understanding and actions. The focus is on understanding the diverse interpretations and meanings attributed by social actors to the phenomenon under investigation. This philosophical approach permits in-depth investigation and contextual

comprehension of the research issue, which is consistent with the qualitative aspect of the study. The researcher sought to get insights into the complex social reality under investigation by capturing the diverse opinions and experiences of the participants through the use of an interpretive lens.

#### **4.5.5 Research Philosophy Appropriate for this Study**

After evaluating different research philosophies, the researcher opted for interpretivism to guide this study. Interpretivism was selected for its emphasis on understanding how individuals perceive the world through actions and interactions, crucial for investigating the influence of agricultural cooperatives on rural livelihood sustainability in KZN province (Gannon et al., 2022). Consequently, the study utilised various qualitative research methods for data collection and analysis.

The use of interpretivism was justified based on its ability to effectively combine different research philosophies to address research problems. Unlike adhering to rigid philosophical frameworks, interpretivism provides a conceptual foundation for qualitative studies, as it does not adhere to a singular school of thought and recognises the diversity of reality. Pragmatism, on the other hand, prioritises practical outcomes and findings, and is less concerned with adhering to conventional procedures and preconceived notions about philosophy and approaches (Horne, 2021).

Under the interpretivism paradigm, the selection of research methods and strategies is based on the study's objectives and contextual circumstances. Kirongo and Odoyo (2020) posit that interpretivism allows for the consideration of multiple perspectives, methods, and assumptions, thereby enhancing the process of data collection, analysis, and interpretation to generate high-quality research outcomes. Embracing interpretivist strategies as a philosophical viewpoint is a strong defense for the use of non-numerical inquiry methods in management and social sciences research. The use of a conceptual framework was justified to support the selection of qualitative research methodologies and ensure the trustworthiness and excellence of the study results.

#### **4.6 Research Approaches**

Deductive and inductive research approaches represent two distinct methods to research. Integrating both perspectives is crucial for developing comprehensive and robust theories in research.

##### **4.6.1 Deductive Approach**

An objective assessment of the body of current information, established rules, and theoretical considerations serve as the foundation for the deductive method to research, which is informed by the positivist philosophy of the natural sciences. It involves establishing hypotheses, collecting and

analysing data, and interpreting findings to either confirm or reject the hypothesis and reevaluate the underlying theory (Faems, 2020). The initial steps of this approach include critically assessing the literature and exploring the connections between variables within the theoretical framework (Bergmann, 2023). This process ensures a comprehensive understanding of the subject matter and facilitates the formulation of well-founded hypotheses, which is a crucial stage in the deductive scientific inquiry (Panya & Nyarwath, 2022).

Verification, as described by Saliya (2023), involves the process of moving from evidence to hypotheses and eventually to theory in scientific study. The fourth stage of the deductive approach focuses on analysing and interpreting the findings of the scientific investigation. In the fifth stage, the researcher evaluates the statistical significance of key variables using inferential statistics to determine whether to accept or reject the hypothesis (Faems, 2020). The sixth stage involves reevaluating the theory under consideration, which can either strengthen or weaken the existing knowledge base. This logical phase of scientific inquiry allows for the generation of generalisations based on the findings (Alharahsheh & Pius, 2020).

#### **4.6.2 Inductive Approach**

Inductive research begins with specific observations or facts and aims to construct theories grounded in empirical examination (Bhatt, 2020). In this approach, researchers gather data and analyse it to identify patterns, trends, and relationships, ultimately building new theories rather than testing pre-existing hypotheses (Kimmons, 2022). Unlike deductive reasoning, inductive research does not require comprehensive prior knowledge of existing literature or theoretical frameworks. Instead, it prioritises real-world data collection to develop insights and generalisations based on the evidence gathered (Rahman, 2020). This method is often employed when little is known about a particular subject, allowing for theory development from the ground up.

The inductive method begins with individual observations and then generalises the conclusions to broader contexts. Through the inductive process, researchers collect an appropriate number of observations and make generalisations about related conditions and circumstances (Rahman, 2020). These generalisations are subject to testing, some of which may be confirmed or rejected. The findings obtained through the inductive reasoning are used as a basis for formulating theories and guidelines that contribute to scientific knowledge (Khatri, 2020). Inductive researchers believe that

if scientific assumptions are confirmed, the findings can be extended into comprehensive principles (Kimmons, 2022).

Critics argue that induction is subject to refutation as it relies on human observations. Kant, the German philosopher, introduced a new perspective challenging the correspondence theory of truth and raising ontological questions (Khatri, 2020). While truth was previously understood as the correspondence between objective ideas and reality, Kant's view emphasised that observation is an act of interpretation shaped by cultural and personal perspectives. Thus, a portion of scientific representation of the universe originates from realities beyond existence, while the rest is influenced by how the world is subjectively categorised. By diligently employing qualitative techniques, researchers derive inductive generalisations from the analysis of raw data. These generalisations are derived from a thorough examination of the data and serve to provide insights and understandings.

#### **4.6.3 Combination of Inductive and Deductive Approaches**

The merging of the two approaches in social/management research resulted from the need to reconcile the distinction between objective and subjective processes in the creation of new knowledge or in the reexamination of existing knowledge in order to offer comprehensive explanations of critical factors. According to Saliya (2023), combining deductive and inductive techniques is not impossible. They claimed that the benefits of such pairings are significant in their experience. Mixed methods research combines deductive (quantitative) and inductive (qualitative) methodologies in a single study dependent on the topic or research questions (Khatri, 2020). In Table 4.1, Saunders et al. (2016) outline the major differences between deductive and inductive approaches to research. Due to the unique character of business activities, which encompasses objects, constructs, and social actors, it is appropriate to combine deductive and inductive methodologies in management sciences research.

**Table 4.1: The significant contrasts between inductive and deductive research approaches.**

Induction emphasises	Deduction emphasises
<ul style="list-style-type: none"> <li>• A close understanding of the research context.</li> <li>• Learning about the interpretations that people give to events.</li> <li>• The collection of qualitative data.</li> <li>• Acknowledging one's involvement in the study process.</li> <li>• A more adaptable framework that would allow for shifting research priorities as the study goes on.</li> <li>• Less concern with the need to generalise.</li> </ul>	<ul style="list-style-type: none"> <li>• Scientific principles.</li> <li>• The need to explain causal relationships between variables.</li> <li>• Moving from theory to data.</li> <li>• The collection of quantitative data.</li> <li>• The operationalisation of concepts to ensure clarity of definition.</li> <li>• The application of controls to ensure validity of data.</li> <li>• A highly structured approach.</li> <li>• The requirement to choose samples of appropriate size in order to draw conclusions that are general.</li> <li>• Researcher independence of what is being researched.</li> </ul>

**Source: Saunders et al. (2016:127)**

#### **4.6.4 The Approach Adopted for the Study**

After carefully considering the merits and drawbacks of both inductive and deductive approaches, the researcher determined that an inductive approach was the most suitable for investigating and exploring the influence of agricultural cooperatives on the sustainability of rural livelihoods in KZN province. This choice was motivated by the ability of the inductive approach to facilitate a comprehensive and exploratory examination of cause-and-effect relationships between multiple variables (Bonache & Festing, 2020). Furthermore, this approach aligned with the interpretivist philosophical perspective adopted in the study (Taherdoost, 2022b). By employing an inductive technique, the researcher was able to address gaps in understanding the relationship between agricultural cooperatives and rural livelihoods, thereby establishing the framework for the study.

To achieve this, the researcher conducted an exploratory analysis to investigate how agricultural cooperatives influences rural livelihoods. The study employed non-numerical data collection and analysis methods, ensuring the reliability of the findings (Saliya, 2023). The use of an inductive framework has garnered support from academics, particularly in the fields of management and social

sciences, due to its capacity to generate high-quality outcomes, especially when examining the relationship between management and other influencing factors.

#### **4.7 The Purpose of Research**

Bougie and Sekaran (2019) state that the most commonly used research purpose classification in the literature on research methodology is the three-part one, which includes exploratory, descriptive, and explanatory reasons. But just as a research question can serve both descriptive and explanatory purposes, so too can a research study. In fact, as Kimmons (2022) notes, the goal of your investigation could vary over time. In this study the researcher employed the exploratory study.

##### **4.7.1 Exploratory Study**

An exploratory research study refers to a systematic investigation that seeks to expand the existing knowledge boundaries regarding a specific phenomenon (Bougie & Sekaran, 2019). It is typically employed when there is limited or no existing research on the problem under investigation. To initiate an exploratory research approach, preliminary familiarisation with the subject matter is necessary in order to gain additional insights into the origins and impacts of the problem (Dawadi et al., 2021). Qualitative research methods, such as interviews and observations, are commonly employed to generate new understanding about the phenomenon. Exploratory research is particularly useful when a comprehensive comprehension of a phenomenon is lacking (Saliya, 2023).

Morss, Lazrus and Demuth (2021) opine that the process of conducting exploratory investigations involves examining the literature, conducting interviews with key informants, and organising focus group discussions. Researchers initially adopt a broad perspective when exploring the phenomenon, gradually narrowing it down as the study progresses. This progressive narrowing is crucial for contributing to the existing body of knowledge through exploratory studies (Dawadi et al., 2021). In the present study, the exploratory research design was implemented by first analysing the literature, which revealed a significant gap in understanding the relationship between agricultural cooperatives and sustainable rural livelihoods. To address this gap, qualitative methods such as interviews and focus groups were employed to explore the link between agricultural cooperatives and rural livelihoods.

In line with the assumptions of interpretivism, this study aimed to investigate the influence of agricultural cooperatives on the sustainability of rural livelihoods in the KZN province. A theoretical framework was developed to establish the missing connection between agricultural cooperatives and rural sustainable livelihoods, and research questions were formulated based on the identified gap in

the literature. By employing an advanced exploratory research design, the study examined the influence of agricultural cooperatives on the sustainability of rural livelihood in KZN. This investigation shed light on the role of agricultural cooperatives in promoting and ensuring sustainable rural livelihoods.

#### **4.8 Research Strategies**

Research strategies or research methodology encompass all of the techniques a researcher uses to gather data in order to draw conclusions that are plausible (Dawadi et al., 2021). Research procedures are conducted using various research designs or methodologies. Research design is the researcher's plan for examining the causes of a particular issue by converting research technique into procedures, methods, and instruments (Morss et al., 2021). In this qualitative research, the researcher utilised the phenomenology approach.

##### **4.8.1 Phenomenological Research**

One of the greatest qualitative research strategies in the last forty years for examining people's experiences is phenomenology (Kimmons, 2022). According to Jiang, Geng and Bai (2020), phenomenology is a research paradigm and method that is mostly utilised in management research to learn more about problems or challenges that are difficult to understand at first glance. This suggests a qualitative approach to data collecting, where data interpretation is involved and necessitates a concentrated effort on the part of the researcher to get past the surface level meaning of replies to determine their true significance. Johannesson, Perjons, Johannesson and Perjons (2021) posit that ideas in phenomenological research are not predefined by the researcher's theoretical interpretation or meaning, but rather are collaboratively established by the researcher and the respondents. Many challenges that researchers face have the potential to skew how they describe or interpret their findings. Furthermore, the researcher's bias may be lessened by the respondents' real-world experience. Using a phenomenological approach is essential when explaining or giving context to people's experiences and viewpoints. The strategy's interpretive component cleared the path for the creation of useful theory.

Johannesson et al. (2021) introduced a framework consisting of seven stages for carrying out phenomenological research. First and foremost, scientists need to fully comprehend the non-numerical data that was gathered from subjects. Second, they pinpoint themes or subthemes that are pertinent to the subject of the study. Thirdly, context is provided for the major themes and subthemes. Fourth, in order to reduce any potential bias, the results are analysed and participants may be

consulted. After conferring with participants, the fifth stage entails summarising the emerging themes and subthemes in relation to the research topic. Reducing the themes to emphasise the fundamental framework of the phenomenon being studied is the main goal of the sixth stage. Lastly, in order to confirm the developing themes and subthemes and gather further non-numerical data, researchers may speak with participants one last time.

These phases give researchers the skills they need to carry out phenomenological investigations, especially when it comes to gathering data and giving it context based on participant experiences and viewpoints. In investigating the influence of agricultural cooperatives on the sustainability of rural livelihoods in KZN province, the foundational assumptions of phenomenological studies were adopted. The choice of this approach was based on the study's objectives and research questions, considering various qualitative research methodologies.

#### **4.8.2 Research Strategy Justification**

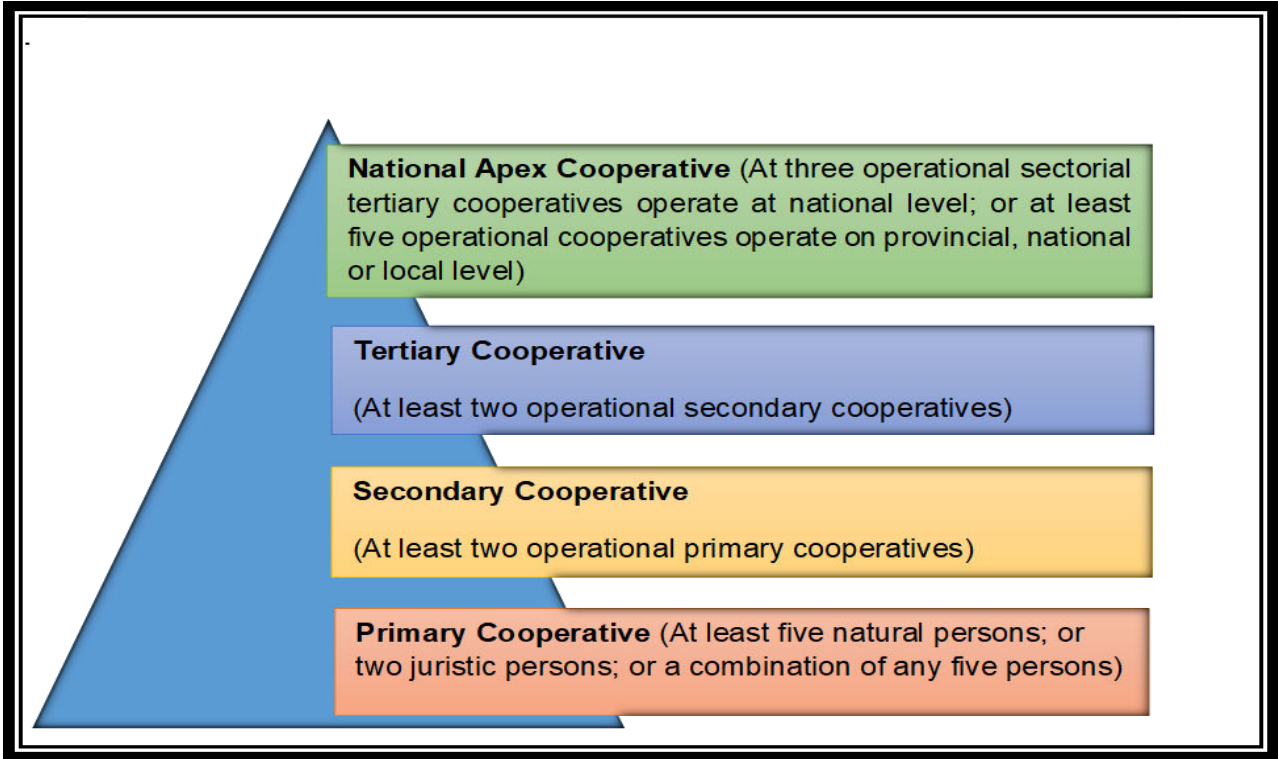
Through careful consideration of the principles, strengths, and weaknesses of various research strategies and aligning them with the study's objectives, the researcher adopted a specific strategy to effectively address these objectives (Badke, 2021). In order to explore the influence of agricultural cooperatives on the sustainability of rural livelihoods in KZN province, a phenomenological research strategy was deemed appropriate to gain a comprehensive understanding of this influence. This research design choice was further supported by the decision to employ a multi-methods qualitative approach for data collection.

The selection of the phenomenological research strategy was based on its potential to provide valuable insights into how agricultural cooperatives can contribute to sustainable livelihoods in rural communities in South Africa. This choice was informed by the aim of obtaining an in-depth understanding of the subject matter. Furthermore, the decision to adopt a contemporaneous transformative mixed-methods approach was justified by drawing on similar empirical studies that employed this approach (Kimmons, 2022).

#### **4.9 Target Population**

According to Bougie and Sekaran (2019), the concept of population in research encompasses the entire group of individuals, events, or objects that are of interest and intended for investigation. This definition is considered comprehensive and all-encompassing. Willie (2023) further elaborates that a sample is derived from the population and represents all potential cases relevant to the study.

According to Kocar and Baffour (2023), a population includes any individuals, events, case records, organisational units, or other sampling units pertinent to the study question. Jalali (2020) opines that the population is the group of factors that the study focuses on and to whom the results are supposed to be applied. Willie (2024) highlights that choosing a sample—a group of people who will engage in the study by being observed or questioned—is an essential stage in the research process. Therefore, a population is a specific set of people who are the focus of research for a certain survey. Duncheon (2020) posits that population parameters in research include every conceivable observation of the random variables being studied.



**Figure 4.2. The structure of cooperative movement in S.A (Source: Created by author, 2023)**

The target population for the study were the board of directors of primary cooperatives up to the national apex cooperative from agricultural cooperatives in the KZN province. The target population was 1877 people who were board members of agricultural cooperatives in KZN province. These included the executive members of 362 primary agricultural cooperatives, 8 secondary agricultural cooperatives, 1 tertiary agricultural cooperative and National Apex cooperative in KZN province in South Africa as indicated in Table 4.2.

**Table 4.2: Target population**

<b>Level of Cooperative</b>	<b>Number of Cooperatives</b>	<b>Number of Directors</b>
Primary Agricultural Cooperatives	362	1810
Secondary Agricultural Cooperatives	8	56
Tertiary Agricultural cooperatives	1	9
National Apex Board	1	2
<b>Total</b>	<b>372</b>	<b>1877</b>

**Source: (Researcher’s compilation, 2023)**

#### **4.10. Sampling**

A sample is a subset of the entire population used by researchers to collect data (Bhatt, 2020). Researchers generally employ sampling because it is difficult to evaluate every member of a community. Bonache and Festing (2020) assert that a sample that is carefully chosen can more closely resemble the population of interest, enabling reasonably accurate relationship generalisation from the sample to the population. On the other hand, results may be distorted by systemic biases present in a poorly drawn sample (Duncheon, 2020). The sample in this study included the board of directors of primary agricultural cooperatives, the board of directors of secondary agricultural cooperatives, the board of directors of tertiary agricultural cooperatives, and national apex board members from the KZN province in South Africa. The researcher was able to evaluate a variety of perspectives, concepts, and circumstances since participants represented all levels of the cooperative movement structure in the area of study, rather than focusing on just one level and restricting the potential for rich data. Depending on the cooperative's constitution, different cooperatives may have varying board sizes. The board members typically include the chairperson, vice-chairperson, secretary, vice-secretary, treasurer, and committee members. In accordance with the cooperative constitution, the board of directors may, however, assign specific duties to other directors, committees, or managers.

##### **4.10.1. Sampling Strategy**

Willie (2024) avers that sampling is a technique used by scientists to deliberately choose a smaller sample of representative objects or people from a pre-defined population to serve as the topic of observation or investigation. Because it is impossible to evaluate every person of a community, researchers frequently use sampling. Even though it is a subset, it nevertheless provides a reliable indication of the population and is easy, inexpensive, and rapid to analyse (Berndt, 2020). It is

imperative for researchers to have in mind, though, that the most reliable method for obtaining authentic, reliable, and accurate data is to test each individual. Sampling is only used when analysing every single person is not practical (Bhatt, 2020). Due to the qualitative nature of this study, a non-probability selection approach was used to choose interview participants. Berndt (2020) opine that this technique means that not all of the researcher's sampling units are taken into account when calculating sample size.

#### **4.10.2. Non-probability Sampling**

Non-probability sampling is a sampling approach used when there is no known or current possibility that a member of the population will be picked as a sample subject (Willie, 2023). Convenience, purposive, quota, snowball, sequential, anomalous case, theoretical, and adaptive sampling are a few non-probability sampling techniques. In situations where randomisation is impractical, non-probability sampling is utilised. This biased strategy makes use of convenient, intentional, snowball, expert, diverse, and proportional strategies (Gill, 2020).

##### **4.10.2.1 Quota Sampling**

When studying strata, or groups, such as the proportion of male to female students, a proportional quota sampling sample should be representative of the population under study. According to Gill (2020), quota sampling is especially helpful in situations where it is not possible to obtain a probability sample, but it is still necessary to construct a sample that is as representative of the community under study as is practical. Any potential sampling error cannot be assessed since quota sampling does not employ random selection (Willie, 2023). Biased sampling could result from the possibility that units are selected for the sample based on accessibility and cost considerations.

In order to probe the influence of agricultural cooperatives on the sustainability of rural livelihoods in KZN, South Africa, a quota sampling strategy was used to conduct focus groups with the management members of agricultural cooperatives. The strategy was employed to group women, youth, and people living with disabilities together in order to get their views in a free environment.

##### **4.10.2.2 Self-selection Sampling**

When a researcher wishes to provide units (or instances), such as individuals or organisations, the autonomy to choose whether to participate in the study on their own, self-selection sampling is appropriate. The primary determinant is whether research participants choose to engage voluntarily or as a result of being contacted by a researcher. According to Willie (2024), this could reduce the amount of time needed to find relevant units (or instances), that is, individuals or organisations that

satisfy the sample's eligibility requirements. Prospective participants are more likely to be dedicated to the research, which could boost interest in providing more information about the topic under investigation and boost attendance (Bhatt, 2020). However, self-selection bias is obviously present.

#### **4.10.2.3 Snowball Sampling**

Existing study participants recruit new study volunteers from their social networks using non-probability sampling strategies like snowball sampling, chain sampling, or chain-referral sampling (Bhatt, 2020). As a result, it appears that the sample group is expanding like a snowball. A sufficient amount of data is obtained as the sample grows to be helpful for research. This strategy is widely used in covert groups that are difficult for researchers to access (Willie, 2024). Due in part to the unclear listing of the relevant population, it may be challenging to identify units to include in the sample. Calculating the potential sampling error and extrapolating statistical findings from the sample to the population are difficult tasks.

#### **4.10.2.4 Purposive Sampling as a Technique**

The researcher must exercise judgment while selecting the study's units, which may include individuals, cases or organisations, events, or data points. We call this category of sampling techniques "purposive sampling." Bhatt (2020) assert that it is also known as "judgmental sampling," "selected sampling," and "subjective sampling" at times. To ascertain whether a phenomenon requires additional research, critical case sampling, for instance, might be employed prior to employing an expert sample approach to further analyse particular issues. Gill (2020) argues that any kind of intentional sampling could be severely impacted by the researcher's bias.

In order to investigate the influence of agricultural cooperatives on the sustainability of rural livelihoods in KZN, South Africa, a purposive sampling strategy was used to conduct interviews with the leaders of secondary agricultural cooperatives, agricultural apex cooperatives, and the National Federation. Participants provided the key ideas while the data was being collected. The researcher was able to collect qualitative data using this method, leading to more precise findings and insightful conclusions. Since the researcher employed the most reliable sources to gather data, the findings are relevant to the study. To collect specialised data for a study, a researcher can focus on specific demographic groups. Since data sources closely mimic the study environment, the margin of error in the data is decreased when using purposive sampling (Bonache & Festing, 2020).

In order to collect crucial information that cannot be found from other sources, the process of "judgmental sampling" entails selecting specific locations, people, or events with intention. This study used purposive sampling method to make sure that the respondents could be easily reached and that the study's goals would be met. The participants' responses were obtained through interviews and focus group discussions.

The sample was chosen from among the members who are leaders in the agricultural cooperatives in KZN province for both interviews and focus groups. In order to grasp different points of view, thoughts, and situations, participants were picked from all levels of the cooperative organisations. This prevented the researcher from limiting the opportunity for rich data by concentrating on just one level.

#### **4.11 Sample Size**

Gruijters and Peters (2022) state that the sample size is the absolute minimum needed to guarantee that the sample is representative of the research population. Forty-seven (47) research participants from the agricultural cooperatives in KZN province were involved in both interviews and focus group discussions. For participants to be included in the sample, they needed to be members of an agricultural cooperative in KZN province. All cooperative members whose cooperatives were not directly working in the agriculture sector and who were not in the board of agricultural cooperatives were excluded from the sample. The researcher divided the target population for the study into two groups, one for the interviews and the other for the focus group discussions. Fifteen (15) participants were involved in the indepth one on one interviews and thirty-two (32) participants were involved in the focus groups discussions.

##### **4.11.1 Focus Group Sample Size**

The researcher involved the nineteen (19) primary agricultural cooperatives Board of Directors members; nine (9) secondary agricultural cooperatives Board of Directors members; and four (4) tertiary cooperative members. A total of thirty-two (32) participants were involved in the focus group discussions. Four sessions with eight members each were held. One group with women only, one group with mixed youth and people living with disabilities, one group with men only, and one with mixed members. Mweshi and Sakyi (2020) state that the researcher receives a plethora of information from the first few interviews, and that additional interviews serve to corroborate the findings of the earlier interviews. At this time, knowledge is considered to have reached saturation. Table 4.3 displays the focus group sample size.

**Table 4.3: Focus group sample size**

<b>Designation</b>	<b>Sample</b>
Primary cooperatives board of directors members	19
Secondary cooperative board of directors members	9
Tertiary cooperative executive members	4
<b>Total</b>	<b>32</b>

**Source: (Researcher’s compilation, 2023)**

The Focus group discussions took place between April 2023 and June 2023 at the SEDA office in Durban, South Africa. The discussions involved four groups, with each group consisting of eight participants. The duration of each session was approximately two and a half hours, allowing ample time for participants to express their thoughts and engage in meaningful dialogue.

**4.11.1.1 Inclusion and Exclusion criteria for Focus Groups**

The respondents were selected on the basis that they are members of agricultural cooperatives and also a member of management committee in KZN province. The members of other forms of cooperatives that are not in or directly working in the agriculture sector were excluded from the list of respondents. A total of thirty-two (32) participants were selected.

**4.11.2 Interview Sample Size**

The interviews were conducted with board members of primary and secondary agricultural cooperatives, tertiary agricultural cooperatives, and the national apex board. Qualitative research often employs a small sample size, which should, however, be sufficient to characterise the phenomenon of interest and address the research questions. Khan and MacEachen (2022) suggests an estimated 30 to 50 participants for phenomenology investigations and ethnography, while Morse (1994) proposes at least six, and Maarouf (2019) recommends 5 to 25. These guidelines assist researchers in estimating the required number of subjects, with the ultimate determination based on when saturation is achieved. The researcher engaged 15 participants in semi-structured face-to-face interviews, purposively selected for their relevance to the study on the influence of agricultural cooperatives on the sustainability of rural livelihoods in KZN, South Africa. The interviewees' workplaces were convenient locations for the interviews. However, due to proximity challenges, some interviews took place at mutually agreed locations convenient for both the researcher and the participant. The interviews occurred between February and April 2023.

**Table 4.4: Interview sample size**

<b>Designation</b>	<b>Sample</b>
Primary cooperative management members	8
Secondary Cooperative management members	4
Tertiary cooperative management members	2
National Apex Board members	1
<b>Total</b>	<b>15</b>

**Source: (Researcher's compilation, 2023)**

#### **4.11.2.1 Inclusion and Exclusion criteria for Interviews**

The researcher interviewed fifteen leaders exclusively from agricultural cooperatives in the agriculture sector. The interviewees included board members from primary cooperatives, secondary cooperatives, the apex cooperative, and the national federation cooperative. Individuals in the administration of these cooperatives who were not members of agricultural cooperatives were excluded from the interviews. A total of fifteen (15) participants were interviewed. Shufutinsky (2020) suggests that initial interviews provide abundant information, and subsequent interviews serve to confirm the researcher's findings. It is claimed that knowledge saturation has been achieved at this point. The next section discusses the data collection methods used in this investigation.

#### **4.12 Data Collection Procedures**

The act of collecting data to assess or offer responses to the variables listed in the problem statement, research questions, and hypotheses is referred to as the "data collection procedure" (Saliya, 2023). The researcher's methods for collecting data were consistent with the objectives of the study. Primary data were used in this investigation because they were obtained through interviews and focus group discussions. The semi-structured interviews served as the primary means of data collection. To test cooperative members' perceptions of the influence of agricultural cooperatives on the sustainability of rural lives in KZN, South Africa, this was crucial.

The researcher sought permission from the agricultural cooperative's apex (SANACO) to administer the instruments as part of the study's data collection protocol. The researcher then scheduled in-depth interviews with participants and closely coordinated with provincial cooperative leadership to organise focus group discussions. Semi-structured interviews were chosen for their high information output (Muhaise et al., 2020) and adaptability in exploring people's actual experiences, crucial to the study. Qualitative research aims to comprehend participants' worldviews and the meaning they attribute to their experiences (Lemon & Hayes, 2020). Interviews allow probing deeper into

implications, investigating attitudes, presumptions, and beliefs underlying people's behavior. To ensure transcript accuracy, interviews were recorded.

Semi-structured in-depth interviews and focus group discussions were employed in this multi-methods qualitative research design for data collection. Following the conventions of qualitative research, the researcher actively participated in data collection within a natural environment (Groenland & Dana, 2020). Moreover, participants were free to choose the interview location, aligning with qualitative research principles of investigating outside a laboratory setting (Campbell et al., 2020). The procedures for gathering three types of data in this study are detailed in the following section.

This study adopted a multi-methods qualitative research design, utilising focus groups and semi-structured interviews for data collection. This approach was deemed suitable for a comprehensive exploration of how agricultural cooperatives impact rural livelihoods in KZN, South Africa. The choice of a multi-methods design allows the integration of various qualitative data collection techniques and associated analysis procedures within a single study, facilitating data triangulation (Kimmons; 2022); Campbell et al., 2020). This approach enables researchers to access diverse worldviews and enhances the interpretation of constructs, contributing to a more detailed understanding of reality from multiple perspectives (Turner, 2020). Additionally, the shortcomings of a non-experimental research design were anticipated and addressed through the selection of this study design.

#### **4.12.1 Interviews**

According to Panya and Nyarwath (2022), direct personal interviews involve verbal exchanges between the researcher and the respondent, typically conducted face-to-face. These interviews employ a combination of open-ended and closed-ended questions to gather information, focusing on inquiry-related topics. Yadav (2022) distinguishes between two types of interviews: structured and unstructured. Structured interviews utilise predetermined sets of questions and defined recording methods, primarily employing open-ended and fixed alternative questions. On the other hand, unstructured interviews offer greater flexibility in questioning techniques, with less standardisation of methods and procedures (Taherdoost, 2022).

To explore the influence of agricultural cooperatives on the sustainability of rural livelihoods in KZN, South Africa, this qualitative study conducted in-depth semi-structured interviews with 15 participants. According to Taherdoost (2021), this qualitative approach allows for the collection of descriptive information regarding individuals' behaviors, attitudes, perceptions, and complex

processes. Turner (2020) supports the notion that in-depth semi-structured interviews enhance data validity by providing participants with the opportunity to express their ideas, values, attitudes, and beliefs in the context of the study. The data in this study were specifically collected through semi-structured in-depth interviews.

From February 2023 to April 2023, 15 participants were selected for semi-structured face-to-face interviews based on their relevance to the core topic of the study, examining the influence of agricultural cooperatives on the sustainability of rural livelihoods in KZN, South Africa. The face-to-face interviews conducted in this study ranged from forty minutes to an hour per participant, depending on their individual characteristics and ability to provide detailed explanations. All interviews took place within agricultural cooperatives, with a specific focus on the sustainability of rural livelihoods. The researcher contacted the selected participants by phone to arrange a convenient time and allowed them to choose the interview location. To ensure minimal distractions and enhance participants' concentration during the interview, the researcher emphasised the importance of a quiet setting (Kang & Hwang, 2021). With the participants' consent, the interviews were recorded by the researcher and later transcribed verbatim to capture every response, following the appropriate methodological approach (Husband, 2020). Transcription and recording were essential for data analysis.

The interview questions were designed to facilitate the researcher's understanding of the issues surrounding the influence of agricultural cooperatives on the sustainability of rural livelihoods and to gather recommendations from participants for improvement. This approach aligned with the collaborative and interactive nature of phenomenological research, where the researcher transitions from an authoritative role to that of a process facilitator (Adeoye-Olatunde & Olenik, 2021). The use of semi-structured and open-ended questions promoted detailed descriptions and stakeholder perspectives (Groenland & Dana, 2020). There were no closed-ended questions that elicited simple yes or no responses; instead, probing strategies were employed when participants provided ambiguous answers. Probing allowed the researcher to seek further elaboration, ask follow-up questions, and engage in informal discussions (Campbell et al., 2020).

The researcher's familiarity with the semantic and management practices within the cooperative sector facilitated comprehension and sense-making during the interviews (Taherdoost, 2022). Notably, participants demonstrated considerable creativity and expressed themselves freely during the face-to-face interviews, likely preferring the open format over strict adherence to predetermined

questions. While the interview method is highly valued in qualitative research, the researcher encountered some challenges that need to be acknowledged. Participant reluctance to engage in the study was evident, particularly among those who perceived conflicts between the National Cooperative Association of South Africa (NCASA) and the South African National Apex Cooperative (SANACO). Additionally, difficulty in locating cooperative members in the remote KZN region posed obstacles to participant recruitment.

#### **4.12.1.1 Justification for using Interviews**

Muhaise et al. (2020) assert that using interviews as a strategy for data collection in qualitative research is a wise decision. One-on-one interviews give the researcher the chance to converse with the subjects and watch out for nonverbal signs. An open-ended discussion of the study's topic was made possible by using a semi-structured interview. According to Ghauri, Grønhaug, and Strange (2020), semi-structured interviews enable the researcher to comprehend the complexity of the situation without imposing any predetermined categorisation.

The researcher used interviews as a method of data collection to gain a deeper knowledge of the perspectives of the participants through interaction and the language they used to construct distinct discourses. By adopting this interviewing strategy, the researcher can obtain more information and a deeper understanding. The reporting and interpretation of the data also take into account the opinions of the participants. According to Muhaise et al. (2020), participants are more inclined to share personal experiences without fear of being judged when the researcher builds rapport and trust with them. The interviews mainly focused on the views of leaders in the upper structure of cooperatives on the influence of agricultural cooperatives on the sustainability of rural livelihoods and how agricultural cooperatives can best contribute to sustainable rural livelihoods.

#### **4.12.2 Focus Groups**

Focus groups are an extended form of a group interview that allows for a more detailed and in-depth exploration of chosen themes. They are facilitated by a qualified moderator and aim to generate insightful information about a specific subject (Husband, 2020). Lobe and Morgan (2021) describe focus groups as informal discussions among selected individuals focusing on predetermined themes. Participants chosen for the focus group should possess expertise or experience in the subject area and provide relevant data. Gundumogula (2020) defines focus groups as a small gathering of individuals engaging in group interviews to discuss topics of interest. These facilitated group discussions aim to collect data from a targeted audience on a particular issue, emphasising preplanning, design, and creating a permissive and non-threatening environment.

Careful consideration of the duration of focus group sessions is crucial for effective organisation (Gundumogula, 2020). Experts recommend varying session lengths, ranging from 30 minutes to three hours per focus group (Gundumogula, 2020). However, it is important to acknowledge limitations associated with focus groups, such as the potential for bias or manipulation through dominant or leading participants, challenges in distinguishing individual perspectives from group perspectives, and difficulties in generalising findings from a small focus group to a larger population due to the lack of a truly representative sample. Additionally, researchers face the arduous task of analysing and interpreting the results obtained from focus groups (Lobe & Morgan, 2021).

The researcher employed semi-structured in-depth group interviews to investigate the perspectives of both general members and board members of agricultural cooperatives regarding the influence of these cooperatives on the sustainability of rural livelihoods. The discussions also centered around identifying the most effective ways in which agricultural cooperatives can contribute to sustainable rural livelihoods. A total of thirty-two participants from agricultural cooperatives in KZN, South Africa took part in the group interviews, which were conducted between April 2023 and June 2023.

#### **4.12.2.1 Justification for using Focus Groups**

Focus groups are fundamentally different from other methods in which data can be collected independently because they promote spontaneous interaction among participants. Individual interviews often yield shallower and less comprehensive insights than the type and diversity of data generated by social interaction inside the group (Husband, 2020). They do not discriminate against people who cannot read or write, and they can encourage participation from those who are reluctant to participate in interviews on their own or who feel they have nothing to say (Lobe & Morgan, 2021). The focus group approach also thoroughly examines the opinions and sentiments of the group members. Gathering relevant and comprehensive knowledge about the topic of the session is made easier with efficient pre-session preparation. Focus groups are a great tool for exploring a wide range of topics to gather additional information pertinent to specific goals and theories. The costs are relatively low compared to other research tools (Gundumogula, 2020). Quantitative or mixed-mode focus groups can also be formed. However, focus groups are the most effective qualitative method of data collection. With their flexibility, depth, and a variety of benefits, focus groups have emerged as an indispensable instrument for obtaining qualitative data.

#### **4.12.3 Secondary Sources of Data Collection**

According to Yadav (2022), secondary or documentary sources are used to obtain information about institutions or people through papers. These sources typically depict societal structures, practices, and events. The data gathered from these sources are effective and useful. Additionally, these sources include historical information not available from any other source (Ghauri et al., 2020). Besides occasionally featuring historical inscriptions and items in newspapers and magazines, documentary sources such as books, memories, survey scripts, letters, and diaries can also provide insight into the historical background, which is vital for understanding. Panya and Nyarwath (2022) claim that secondary data is the information used in research studies, and specialised surveys and investigations are not required. Statistical data can be obtained from other organisations, reports, or documents previously released by them as part of their regular operations. This data is time and cost-efficient and can be either disclosed or not. Examples of published sources include publications from international organisations, reports from committees and commissions, publications from the government, semi-official publications, and private publications.

The researcher also collected secondary data, including document reviews of reports such as the Department of Agriculture, Forestry, and Fisheries annual reports; the DSBD review reports; the DTI annual reports; SANACO reports; as well as newspaper articles about the cooperative movement in South Africa. It also included minutes from the apex-coordinated projects' cooperative meetings. Other parliamentary monitoring group documents on cooperatives, such as parliamentary committee reports, were reviewed to identify issues concerning the roles of various cooperative organisations. The advantage of using secondary data was that it allowed the researcher to gain further insight into the problem scenario and identify other areas that needed more focus.

#### **4.12.4 Primary Sources of Data Collection**

In this study, interviews and focus group discussions served as the primary research tools to collect firsthand information from participants and explore the influence of agricultural cooperatives on the sustainability of rural livelihoods. The researcher employed semi-structured, open-ended questions to gather relevant data regarding the influence of cooperatives and the ways in which they can contribute effectively. The design of the interviews was carefully aligned with the study's objectives and addressed a gap identified in the literature review. Previous research that relied on interviews with government officials to examine the relationship between culture and performance encountered limitations, as these officials were constrained by contractual obligations and reluctant to provide

sensitive information (Mazhar et al., 2021). Consequently, it was deemed more suitable to gather data from key individuals who possess a deep understanding of the cooperative culture, comply with regulations, and actively contribute to the cooperative's objectives through their insights (Ghauri et al., 2020). The study involved conducting both individual interviews and focus group discussions with members of the agricultural cooperatives, ensuring a comprehensive representation of the general membership's perspectives.

#### **4.13 Data Quality Control**

To ensure data quality control, measures were taken to identify any potential gaps in critical information, address data transfer issues, and eliminate duplicates and outliers. The accuracy of the data was further ensured by carefully selecting suitable participants for the study.

While traditional quantitative research has been regarded as more rigorous and credible than qualitative research, qualitative research challenges the notion of generalisability and emphasises the contextual nature of meaning (Adeoye-Olatunde & Olenik, 2021). Khan and MacEachen (2022) argue that no two individuals can experience the same issue in exactly the same way, making it difficult to extend qualitative research findings to other situations. Various methods are employed in qualitative research to assess and validate its outcomes, emphasising characteristics that contribute to its validity.

In contrast, quantitative descriptive research focuses on quantifiable processes and relies on the measurement of quantity (Adeoye-Olatunde & Olenik, 2021). On the other hand, qualitative descriptive research aims to capture and describe qualitative phenomena that are subject to change or connected to quality or kind. Particularly in behavioral sciences, qualitative research plays a crucial role in uncovering the fundamental causes of human behavior (Willie, 2024). Despite its challenges, such as employing word associations, phrase completion tests, and other projective procedures, qualitative research provides valuable insights into the factors influencing behavior and personal preferences.

To gain comprehensive insights and enhance the reliability of the collected and analysed data, a qualitative approach was adopted in this study. This approach was deemed most suitable and effective for investigating the influence of agricultural cooperatives on the sustainability of rural livelihoods, as it allows for a comprehensive examination of various aspects related to the problem. Qualitative research, due to its distinctive positioning, allows researchers to obtain process-based, narrative, and storied data that closely reflects human experiences (Yadav, 2022). Personal stories

and lived experiences can impart significant knowledge; however, the degree to which an individual trusts the storyteller plays a crucial role in determining the credibility of the narrative (Eyal et al., 2021). Establishing trust is, therefore, fundamental in qualitative research. Researchers enhance the credibility of their findings by employing specific methodologies. According to Stahl and King (2020), the concept of trustworthiness in research is evaluated using four key criteria: credibility, transferability, dependability, and confirmability.

#### **4.13.1 Credibility and Trustworthiness**

Credibility in qualitative research refers to the extent to which findings align with reality (Yadav, 2022). Since qualitative inquiry is subjective, researchers promote credibility by using techniques such as triangulation, which involves analysing data from multiple sources to identify patterns. Member checking, where participants review research interpretations, is another method used to ensure accuracy (Stahl & King, 2020). Reflexivity, in which researchers critically assess their biases, also strengthens credibility. These practices collectively enhance the authenticity of the findings and trust between the researcher and readers.

With the use of this variable, the research can be sure to fairly examine or evaluate the hypotheses for which it was intended. Several of the issues raised assess how closely the results match reality (Mazhar et al., 2021). Therefore, it is crucial to check that the research techniques utilised maintain the quality of the data and ensure that it appropriately reflects the topic under study. In order to get reliable firsthand data on the influence of agricultural cooperatives on the sustainability of rural livelihoods, semi-structured, in-depth interviews, and focus groups were utilised. The participants were able to freely express their experiences and ideas throughout the flexible interview format, and the researcher was able to observe their reactions as they spoke.

Audio recordings of the focus group discussions and in-depth interviews were used to ensure that the findings drawn from them were not skewed but rather accurately reflected the opinions of the participants. The researcher used pre-planned and semi-structured interview guides to guarantee consistency between the in-depth interviews and the focus group discussions, which is crucial to understanding a study problem.

#### **4.13.2 Dependability as part of Trustworthiness**

Dependability emphasises the stability of research findings over time. It is achieved by documenting the research process in detail, allowing others to audit and review the study's methodology (Stahl & King, 2020). Techniques like peer debriefing and reflexive auditing help ensure dependability. Peer

scrutiny allows for external feedback on the research process, while reflexive auditing involves researchers reflecting on their biases and decisions during data analysis. These practices enable researchers to produce trustworthy findings by maintaining transparency and rigor throughout the research process (Busetto et al., 2020). Similar outcomes are achieved when comparable techniques are applied in the same situation.

The researcher should be able to list the several steps required to prove the validity of the study, and the processes and procedures should be comprehensive enough for other researchers to duplicate them in pertinent investigations. Dependability was guaranteed by carefully recording the study procedure and ensuring that it was rational and traceable (Taherdoost, 2021). As indicated by Kimmons (2022), the research questions were created in a way that should enable subsequent studies to provide results that are similar. The use of members of only agricultural cooperatives as participants makes the research dependable since the researcher used participants with the same responsibilities in the cooperative movement.

#### **4.13.3 Transferability in Trustworthiness**

Transferability, a key aspect of trustworthiness, refers to how research findings can be applied to other contexts (Stahl & King, 2020). Since qualitative research does not aim for replicability, thick descriptions of research contexts are essential. These detailed descriptions allow readers to determine whether the findings are relevant to their own situations (Nassaji, 2020). The extent to which a study can be transferred depends on how well the context and circumstances are described, enabling others to draw parallels and apply findings to their unique environments (Stahl & King, 2020).

This variable determines the relevance of the study's findings to other pertinent studies. It may be difficult to show how the findings of a qualitative investigation might be used in different contexts because such findings are context-specific. Hence, the researcher adopted the qualitative research approach to offset one-on-one interviews' weaknesses with the focus group method strengths (Ackerman et al., 2021). The researcher made sure that the study was directed by the research objectives since the researcher thought transferability issues were significant. The researcher created the interview guide (Annexure C) using the theoretical framework as a reference to create the research questions that would, in turn, influence the research objectives supporting the investigation (Kang & Hwang, 2021). Achieving the goals of the research depends on the data and conclusions of the study being transferable to other provinces and eventually other developing countries. As a result,

the researcher made sure that the whole cooperative-related discussions were in line with the ICA principles, which regulate cooperatives globally and are recognised by law.

#### **4.13.4 Confirmability as a part of Trustworthiness**

A fourth perspective on trustworthiness is confirmability, which refers to achieving as close to objective reality as qualitative research can reach. Stahl and King, (2020) describe emergent design positivism as one of the few forms of qualitative research that addresses the concept of confirmability. For research to be audited, it is necessary to acknowledge some level of objective reality. Qualitative researchers who value and strive for objectivity focus on concepts like accuracy and precision in their research practices and rely on collaboration with other researchers, rather than constructing a reality in their findings (Stahl & King, 2020). Striving for non-involvement in qualitative research settings makes sense to prevent contaminating pristine, natural areas with researchers' biases. Consequently, the application of confirmability in qualitative research is limited, especially in relation to emergent design positivism.

#### **4.14 Procedures for Data Analysis**

The primary objective of content analysis is to assess the contextual implications of a transcript, involving the examination of narrative data to gain insights into the study's context (Eyal et al., 2021). This non-numerical technique is commonly utilised by researchers to analyse the substance of transcripts. In this study, qualitative content analysis was employed, wherein codes were applied to identify themes and patterns within the transcripts. By grouping the information into themes, subthemes, or patterns, the analysis and interpretation of non-numerical data were facilitated (Dhakal, 2022). Content analysis focused on identifying recurring themes that directly addressed the research questions, allowing the researcher to explore the phenomenon through textual interpretation and present logical arguments from multiple perspectives.

The study adopted a qualitative research approach and utilised semi-structured interviews and focus group discussions for data collection and analysis. Thematic analysis, aided by NVIVO 14, was applied to analyse the data obtained from interviews and focus group discussions. To effectively identify themes that closely aligned with the study objectives, the extensive volume of transcribed material was condensed and reorganised. This process aimed to discover meaningful themes and sub-themes without compromising the inclusion of important topics relevant to the research questions. Each dataset mentioned in the transcript was reflected in the condensed datasets, maintaining the order in which they were organised and presented. Through careful examination of how each theme

addressed the research question, logical inferences were drawn from the identified themes (Eyal et al., 2021).

#### **4.14.1 A Six-phase Approach to Thematic Analysis**

##### **Phase 1: Familiarising with the gathered data**

After transcribing the conversations, reading and rereading the transcripts, and/or listening to the recordings, the researcher must actively and thoroughly engage with the data to complete this step (Popenoe et al., 2021). The researcher needs to have a comprehensive understanding of all aspects of the data, and the fundamental ideas of the interaction must be crystal clear to them. This is where the foundation for further analysis is built. Both transcripts and audio recordings should be coded by the researcher using analytical tools, and for meeting these requirements, NVivo (version 14) software was selected.

##### **Phase 2: Generating initial codes**

The audio file is imported into NVivo as an audio wave that may be played back and split up into several audio segments. According to Bingham (2023) instructions, the author used NVivo for audio coding. The researcher began searching for preliminary codes—aspects of the data that appear relevant and intriguing—after familiarising themselves with the findings. These codes function as a discourse context signal even though they are more common and focused than themes. Two source folders—one for transcripts and the other for audio recordings—were made in NVivo before the analysis started. It was simple to load the transcript into NVivo in word format. After ensuring that all necessary files were transferred, the next stage was coding, which entailed organising extracts from linked documents into nodes. After carefully reading and listening to the texts and audio files, any significant passages were tagged to free nodes (Popenoe et al., 2021).

##### **Phase 3: Searching for themes**

The next stage of the procedure was to begin deciphering the collected codes. Relevant data extracts can be divided or combined to form broad themes. The researcher's argument needs to take into account the connections between codes, sub-themes, and themes (Lobe, Morgan & Hoffman, 2020). After listening to audio files, pertinent audio snippets were coded to either newly created or preexisting nodes. By just double clicking the nodes, the content was examined continuously. Additionally, coding stripes were activated to aid in the coding process by offering some insights, such as the locations of the densest coding and so forth. Upon completion, nodes corresponding to every source were established, containing the pertinent information (Dhakal, 2022). Using "see also

links," in addition to coding to nodes, the researcher was able to link concepts that emerged from two or more sources.

#### **Phase 4: Theme review**

The researcher then decided whether to integrate, improve, separate, or reject the initial suggestions after giving the themes further in-depth examination. Dhakal (2022) states that while the content in the themes should make sense, there should be obvious differences between them. This is usually done in two steps: checking the themes in connection to the coded extracts is the first step, and validating the entire data set is the second. A themed map is created at this phase.

#### **Phase 5: Theme definition and naming**

At this stage, the data's themes and possible sub-themes need to be "refined and defined." Further study is needed to support the hot themes (Dawadi, 2020). Topic headings and succinct working summaries that concisely and clearly convey the main ideas of each subject are required from the researcher. The ideas now need to come together to form a coherent narrative based on the available data. Both audio files and transcripts had annotations, but since annotations served as a reminder or explanation for audio samples, they were especially crucial for coding audio files.

#### **Phase 6: Report production**

According to Lobe, Morgan and Hoffman (2020), in order to transform their analysis into a comprehensible piece of writing, the researchers must next provide exact examples that are captivating and vivid and relate to the research topic and material. The reader must be persuaded of the report's validity and worth by the findings. Beyond merely summarising the concepts, it must specifically address the research issue and contain an assessment based on verifiable data. A larger picture and/or a visual representation of the data and the work's progress become essential prerequisites for the theory's formulation and testing when the analysis process reaches an advanced stage (Dhakal, 2022). Reports, queries, charts, and models were developed at this stage.

#### **4.15 Elimination of Bias**

Bias can affect research's planning, gathering, analysing, and publishing stages (Finlay, 2021). The authors emphasised the importance of comprehending research bias in order for studies to critically and honestly evaluate the findings and steer clear of potentially dangerous or subpar remedies. The researcher paid close attention to eliminating prejudice and maintaining objectivity throughout the investigation.

#### **i). Non-use of gender aligned words**

Gender-neutral language, a type of linguistic prescriptivism, aims to exclude (or neutralise) gender connotations in sentences that describe people (Hall, Gaved & Sargent, 2021). In addition, gender-specific job titles were still excluded from the study because they might have revealed the participants' gender. Additionally, pronouns that could be used for either men or women were employed to debunk the notion that language quietly reinforces gender and gender stereotypes.

#### **ii). Refraining from classifying people according to their race or ethnicity**

Mattimoe et al. (2021) assert that a person should be more motivated to maintain and grow their identity the more important it is to their sense of self. According to the social identity theory, individuals are actually just as motivated by their own feeling of self-worth to uphold and improve the group's self-esteem as they are by their own. People's self-esteem is significantly influenced by their social identities (Kurten et al., 2022). To avoid insinuating that people of this ethnicity are inferior or superior, no words that identify them were used in this inquiry.

#### **iii). Refraining from using words that imply judgement or reinforce stereotypes**

The nature of prejudice has led to a more detailed and rigorous examination of bias and its related phenomena. According to Turner (2020), bias, stereotyping, and discrimination are now of interest to various industries, including business and health as well as adjacent fields like sociology and political science. The study tried to address this problem by avoiding language that suggests bias or encourages prejudice.

#### **iv). Avoid making generalisations about various age groups**

Age-related presumptions may affect data that is important for trustworthy research. To prevent making assumptions about different age groups, the survey instrument was raised above the minimum legal age of employment (18 years) and up to the pensionable age of 60 years.

### **4.16 Ethical Considerations**

#### **i). Getting participants' informed consent**

In order to obtain participants' "informed consent," it is crucial to fully disclose the objectives and parameters of the study. Participants in the study can only give their informed consent once they are fully informed of the study's objectives and the extent to which they would be required to engage in the research project. The researcher informed participants about the sort of activity and the intended study subjects in order to accomplish this purpose (Annexure A). The researcher also informed the participant that they had the freedom to leave the study at any moment without penalty.

## **ii). Ensuring that participants are not harmed**

Researchers must put safety measures in place to make sure study participants are not hurt. To make sure that nobody was held accountable for their comments, formal authorisation from the appropriate warehouse was asked and given.

## **iii). Ensuring confidentiality and anonymity**

The researcher was responsible for making sure that no participant's identity was revealed. In order to protect participant anonymity, the researcher restricted access to raw data by securely storing all data, presenting results in a way that made it difficult to identify specific persons, and requesting permission before using the data going forward. Acronyms were used to protect individual identities in addition to combining the study's findings to reflect the opinions of all participants as a whole.

## **iv). Permission to conduct the study**

It is essential to take the proper steps when asking for permission to do research. The study's success depends on its capacity to recruit participants. The SANACO at the top management was alerted to the matter (Annexure E), and the UKZN Research Committee's ethical permission was requested (Annexure B).

## **4.17 Chapter Summary**

This chapter offered justification for the research approach and technique employed in the study. Before choosing interpretivism as the philosophical method best suited for this study, this chapter provided a thorough overview of the main research philosophies, emphasising their benefits and drawbacks as well as the subject areas where they are most effective. The competency, accessibility, and willingness of the participants to engage in the study were taken into account while determining the sample size, and the population of the study was also taken into consideration when using different sampling strategies. This explains why individuals were selected using purposive sampling technique. In this chapter, the design of the primary research instrument for primary data collection, efforts to ensure the psychometric features of the instrument, and administration procedures for the instrument were described. The next chapter presents and discusses the research findings from the in-depth interviews and focus group discussions.

## **CHAPTER FIVE: FINDINGS AND DISCUSSION FROM INTERVIEWS AND FOCUS GROUP DISCUSSIONS**

### **5.1 Introduction**

The previous chapter provided a comprehensive overview of the research methodology employed in this study, including details on the study's population, sample, and data collection and analysis procedures. In this chapter, the qualitative findings of the study are presented based on the information gathered through conducted interviews and the focus group discussions. The interviews and focus group discussions were conducted with members of agricultural cooperatives in KZN, with the primary objective of exploring the influence of agricultural cooperatives on the sustainability of rural livelihoods in the province. The chapter proceeds to discuss and analyse the study's five research objectives, with the interviews and the focus group discussions specifically addressing the following objectives:

- i) To establish the influence of agricultural cooperatives on rural livelihoods in respect of environmental sustainability.
- ii) To establish the influence of agricultural cooperatives on rural livelihoods in regards to social sustainability.
- iii) To establish the influence of agricultural cooperatives on rural livelihoods in respect of economic sustainability.
- iv) To identify the challenges faced by agricultural cooperatives in KZN, South Africa, and assess their influence on the sustainability of rural livelihoods.
- v) To provide recommendations for enhancing the agricultural cooperatives on the sustainability of rural livelihoods in KZN.

To achieve this, the interview schedule was structured in alignment with the aforementioned research objectives. Each focal area was systematically addressed through a series of questions, with the interviewer guiding the conversation by posing specific inquiries that facilitated open and honest discussions. The duration of each interview ranged from forty minutes to an hour, contingent upon the interviewee's availability. Importantly, all interviewees actively provided responses to every question posed. The analysis of the interview data in this chapter was conducted using NVivo software, which holds the advantage of being compatible with thematic analysis methodologies. NVivo's functionality in facilitating thematic coding was harnessed, enabling the creation of codes.

These codes offered a practical and structured approach to constructing coding frameworks and identifying prevalent themes within the dataset.

cooperatives	community	need	activities	land	sustainab	product	total	training	come	respons	social	south	commu			
			think	work	farming	vegetab	good	part	person	apex	custom	farm	sector			
	people	governmen					grow	sustain	another	crops	sometin	want	well			
members			one	influence			inputs	populac	years	membr	name	progra	assist	educa		
		get					member	every								
	rural		use	like					just	respect	busine	month	done	econo	going	must
		water					terms	large								
agricultural			agriculture	time					many	since	emplo	mover	rands	even	lot	numbe
	livelihoods						much	market								
		produce	promote	general					working	support	encour	now	challe	pover	reduce	sustain
							challenge	benefits	ensure	among	know	always	create	prote	africa	form
															environm	

Figure 5.1. Word tree (Source: Field work, 2023)

**Tree Maps:** these display the data (words that are used a lot) according to block size. As a result, the larger blocks represent those most often used terms. The complete map provides a comprehensive understanding of the placement of data with respect to reference size (Nvivo online, 2022).



Figure 5.2. Word cloud (Source: Field work, 2023)

Word clouds show which words are used most frequently. More usage of the word is implied by a bigger font size. This aids in highlighting important topics or themes (Nvivo online, 2022).

**5.2 Interview Participants’ Demographics**

**Table 5.1: Interview participants’ demographic**

Participants	Gender	Marital Status	Years of membership	Age	Ethnicity	Qualification
1	Male	Married	10	53	Black African	Diploma
2	Female	Widowed	6	55	Black African	Certificate
3	Male	Married	12	63	Black African	Certificate
4	Male	Married	18	72	Black African	Diploma
5	Male	Married	9	36	Black African	Degree
6	Female	Married	8	42	Black African	Diploma
7	Female	Widowed	10	65	Black African	Certificate
8	Female	Widowed	10	56	Black African	Certificate
9	Male	Married	15	44	Black African	Diploma
10	Male	Single	5	27	Black African	Certificate
11	Male	Single	6	26	Black African	Degree
12	Female	Married	9	37	Black African	Certificate
13	Female	Married	12	39	Black African	Degree
14	Male	Married	14	66	Black African	Certificate
15	Female	Married	13	43	Black African	Certificate

**(Source: Field work, 2023)**

There was a notable mix of genders among the participants, with an almost equal representation of males and females. This gender balance was crucial as it allowed for a comprehensive exploration of how agricultural cooperatives impacted both men and women in rural communities. Such inclusivity was vital for understanding the ways in which cooperative initiatives contributed to the sustainability of livelihoods across gender lines. This address imbalance that typically exists between men and women within a community that has an impact on power dynamics. Deng et al. (2020) observe that it is one thing to guarantee that gender concerns are addressed; it is quite another to

allow women to voice their true feelings, desires, and requirements in regard to specific livelihood difficulties in practice. Marital status emerged as another key factor in the analysis. Participants were predominantly married, indicating that agricultural cooperatives played a significant role in the lives of families and married individuals. The inclusion of widowed participants added another layer of complexity, as their experiences might have reflected the challenges faced by individuals managing agricultural activities after the loss of a spouse.

The years of cooperative membership revealed a range of experiences, from relatively new members with five years of membership to long-standing members with over 18 years of participation. This diversity allowed for a comprehensive exploration of how the influence of agricultural cooperatives evolved over time. Longer-term members provided insights into the sustained impact of cooperatives on rural livelihoods, while newer members offered fresh perspectives and highlighted recent developments. Fisher et al. (2020) argue that motivated and experienced management is crucial in designing and implementing business policies that cater to members' interests while fulfilling entrepreneurial goals. Additionally, the age distribution of participants was wide-ranging, encompassing individuals in their 20s to those in their 70s. This diversity was essential for capturing the generational dynamics in the context of agricultural cooperatives. Younger participants shed light on the role of cooperatives in attracting and engaging the youth, while older participants provided historical perspectives on the cooperative's long-term influence.

However, ethnically, all participants identified as Black Africans, reflecting homogeneity in this demographic characteristic. This suggested a need for caution in generalising findings to other ethnic groups. However, the concentration on a specific ethnic group allowed for an in-depth exploration of the experiences within this community. Guttman (2021) suggests that homogeneous groups have a higher likelihood of achieving successful self-governance through collective action. On the other hand, Scheffran (2023) notes that heterogeneity arises when the gap between the rich and the poor is relatively narrow, and shared expenses become a barrier for the less privileged to participate or benefit from collective action.

Finally, participants possessed varying educational qualifications, from certificates to diplomas and degrees. This educational diversity enabled an analysis of how different levels of education intersected with the perceived impact of agricultural cooperatives. It shed light on whether higher educational attainment correlated with a more understanding of cooperative dynamics and their influence on rural livelihood sustainability. Rashidipour (2020) concludes that the success of a

cooperative is determined by the education levels, technical abilities, dedication, and connections between management and members.

### **5.3 Focus Group Target Participants**

The study was conducted with a specific target audience consisting of board of directors and executive members affiliated with agricultural cooperatives in the KZN province. The sample for the study included nineteen members from primary agricultural cooperatives' board of directors, nine members from secondary agricultural cooperatives' board of directors, and four executive members from tertiary agricultural cooperatives in KZN province. In total, there were thirty-two participants who took part in the focus group discussions. The discussions were organised into four sessions, each consisting of eight members. The composition of the groups was as follows; one group comprised of women only, one with a mix of youth and people living with disabilities, one group with men only, and the last one with a mixed membership.

The focus group discussions' thoughtful composition, encompassing varied demographics like gender, age, and abilities, enhances the study's robustness. This design recognises the diverse stakeholder landscape within agricultural cooperatives, ensuring a comprehensive exploration of perspectives. By including specific groups, such as women, youth, and individuals with disabilities, the study promotes inclusivity, providing a platform for often marginalised voices. According to Papilaya et al. (2021), cooperative governance is founded on an egalitarian one-member, one-vote rule, which ensures inclusivity and prevents the exclusion of stakeholder classes, in contrast to investor-owned businesses. The mixed-gender and mixed-membership groups add further depth, fostering dynamic interactions. This approach enriches the qualitative data collected, offering a holistic understanding of the social sustainability dynamics within agricultural cooperatives in the KZN province, ultimately strengthening the study's reliability and relevance (Mazhar et al., 2021).

#### **5.3.1 Overview of the Focus Group**

The focus group discussions took place between April 2023 and June 2023 at the SEDA office in Durban, South Africa. The study achieved good participation as it represented almost all levels of the cooperative movement structure during the focus group discussions. Invitations were sent out to participants, providing a comprehensive explanation of the focus group discussion's purpose, as outlined in the informed consent letter. Four groups, each consisting of eight participants, were involved in the discussions. The first group was exclusively composed of women from various age groups, all of whom possessed experience in working with agricultural cooperatives. The majority

of participants in this group were single mothers actively involved in the management of agricultural cooperatives. The second group consisted of young individuals, aged 35 years or below, including people living with disabilities. As is customary in qualitative research, special attention must be devoted to minority opinions and examples that may not align with the researcher's main theory, and equal consideration should be given to marginalised voices (Gannon et al., 2022). The third group exclusively comprised men of all ages who held management positions within agricultural cooperatives across various levels of the cooperative movement structure. The last group was a mixed composition of young and adult individuals, encompassing both men and women from diverse backgrounds. Each session lasted approximately two and a half hours, allowing ample time for participants to express their thoughts and engage in meaningful dialogue.

With the assistance of SANACO, the provincial Youth Cooperative Hub, and the Ethekeeni Business Support Unit - Cooperative Development program, the researcher successfully brought together the participants. The discussions began with an introductory section that presented the study. Research questions were outlined by the research assistant in the native language, ensuring that every participant had a clear understanding of what they were expected to discuss. Participants were encouraged to express themselves in the language they felt most comfortable with during the discussion. To make the participants feel comfortable, the researcher provided refreshments during the discussions and also reimbursed the transportation expenses incurred by participants from remote rural areas.

### **5.3.2 Focus Group Procedure**

First, introductions were made, and participants introduced themselves, indicating the positions they hold in their agricultural cooperatives. The researcher and research assistant also introduced themselves, emphasising that the study was for academic purposes, and they were not interested in knowing and recording the participants' names. This approach aimed to create a comfortable atmosphere, encouraging everyone to freely express their views during the discussion. A focus group interview is described as “a carefully planned discussion designed to obtain perceptions on a defined area of interest in a permissive, non-threatening environment” (Husband, 2020:206)

To respect the participants' time, they were asked to collectively agree on how long the discussion should last. After explaining the discussion's processes and procedures, the research assistant informed the participants that the session would be tape-recorded and video-recorded for easier reference during data analysis. To facilitate recording, the participants were arranged in a circle

shape, ensuring that everyone could be heard and recorded clearly. A voice recorder was placed at the center of the table to capture the discussion.

The research assistant then proceeded to ask questions in both English and IsiZulu, allowing each participant to express their opinions in a language they felt most comfortable with. This bilingual approach aimed to ensure that language barriers did not hinder meaningful contributions from any participant.

### **5.3.3 Findings from Focus Group Discussions**

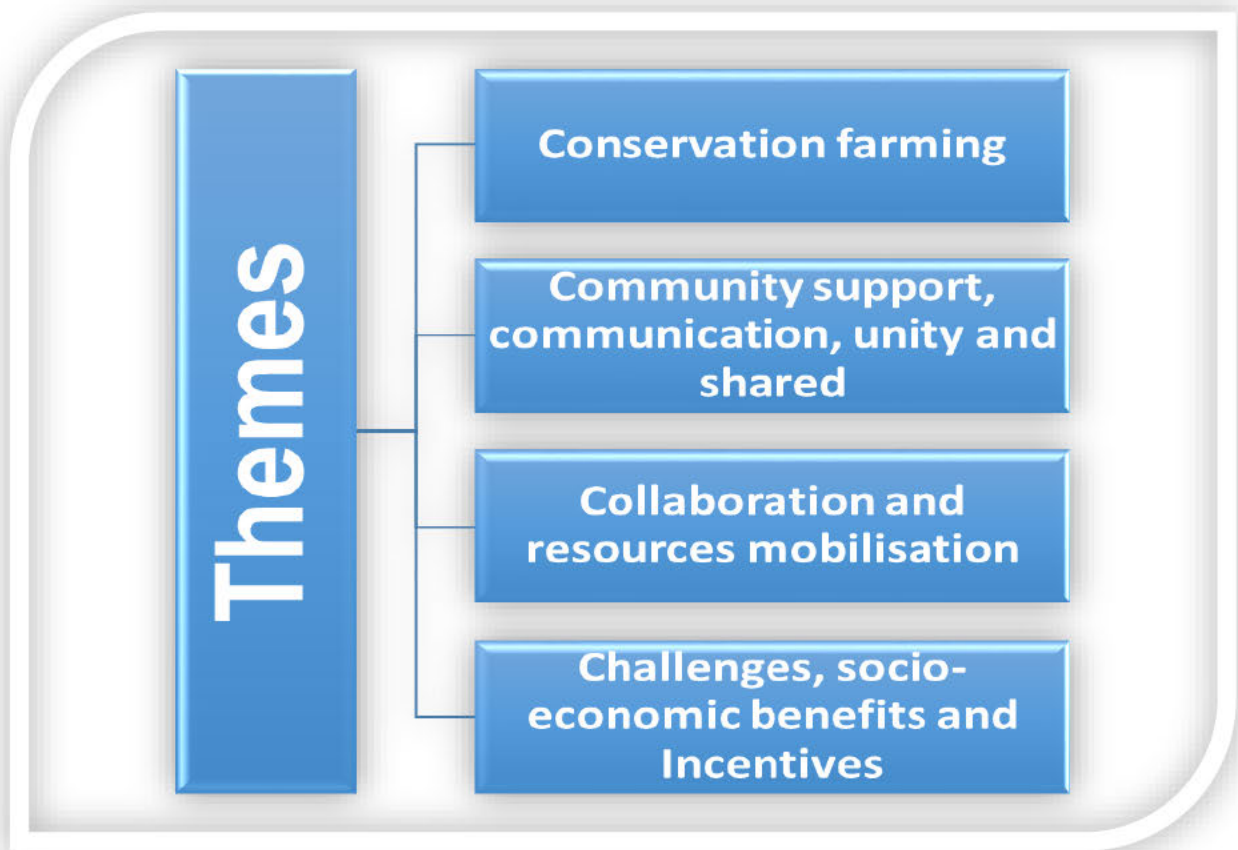
Qualitative data analysis involves identifying, classifying, and categorising themes and patterns within the collected data (Khan & MacEachen, 2022). This process, commonly referred to as 'data analysis,' includes organising both primary and secondary data gathered during the study. Dawadi (2020) describes qualitative data analysis as the gathering, coding, segmenting, and developing patterns from unstructured data. The primary goal is to understand the perspectives of participants and provide insights into the research questions, ensuring the study's objectives are achieved. Typically, thematic data analysis is used, which involves grouping data based on its relevance to the research topic, allowing researchers to uncover patterns and themes that deepen understanding (Finlay, 2021).

Focus group discussions, a widely used method in management and social science research, complement other data collection techniques such as individual interviews and participant observation (Mauthner, 2020). According to Gundumogula and Gundumogula (2020), focus groups encourage participants to explore specific issues through collective activities like debating questions, reflecting on shared experiences, or examining a particular topic. This approach is particularly useful for probing people's conversations, viewpoints, convictions, and worries, making it a valuable tool for qualitative research. Focus groups offer participants the opportunity to generate questions and discuss priorities in their own language and terms (Husband, 2020). Group dynamics facilitate a variety of communication forms, such as jokes, anecdotes, and debates, which are key to daily interactions (Gannon et al., 2022). These informal communication patterns often reveal deeper insights into participants' perspectives than direct questions might. Focus groups also shed light on how individuals articulate, challenge, and influence each other through social interactions, offering a unique view of peer communication and group norms.

The analysis of focus group data follows a similar approach to other qualitative data, where themes are compared and examined in relation to variables within the sample population (Popenoe et al., 2021). In this study, focus group discussions were used to validate the findings from the interviews, providing further insights and strengthening the reliability of the study's conclusions. The following themes were identified and came up in discussions:

#### 5.4 Themes of the Study

Guided by the word cloud and tree map, the main themes identified are presented in Figure 5.3:

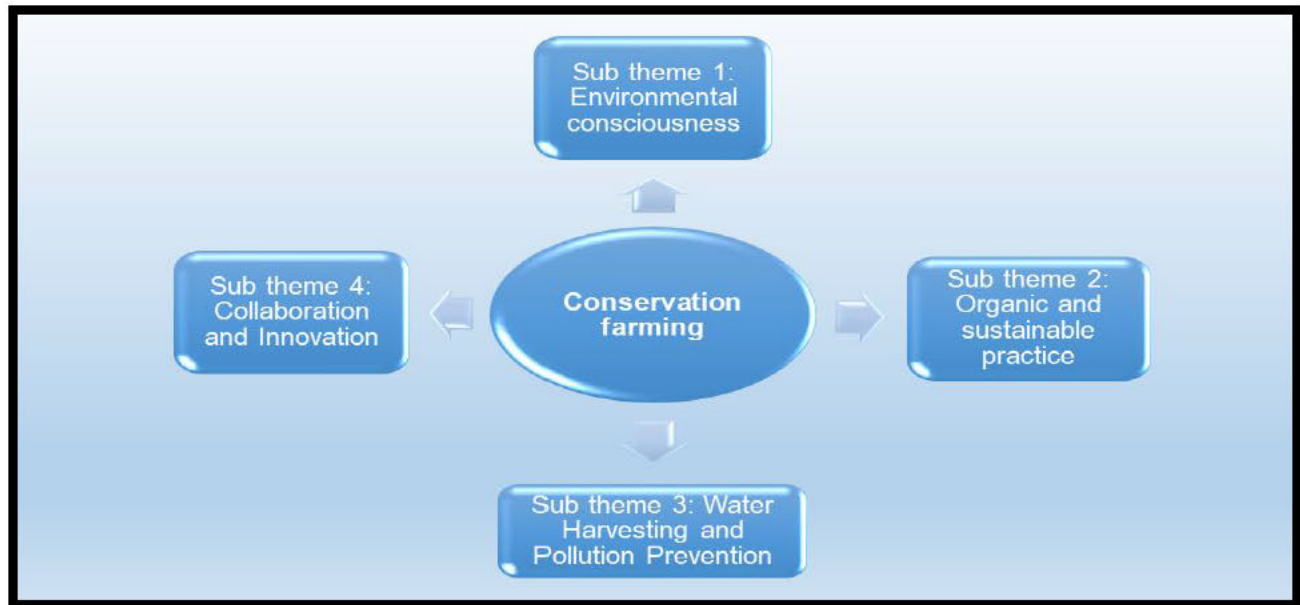


**Figure 5.3. Identified main themes (Source: Field work, 2023)**

To facilitate easy reference, the analysis was aligned with the four key themes discussed, as outlined in Figure 5.3 above. The analysis of the interview data was organised according to the following themes:

### 5.4.1 Conservation Farming

This key theme highlights the processes of conservation farming, which played a crucial role in the sustainability of rural communities. Conservation farming was informed by the following sub-themes: environmental consciousness, organic and sustainable practices, water harvesting and pollution prevention, and collaboration and innovation.



**Figure 5.4. Sub-themes for main theme 1 (Source: Field work, 2023)**

#### 5.4.1.1 Environmental Consciousness

This sub-theme examined how rural agricultural cooperatives prioritise environmental consciousness in their farming practices. The participants demonstrated a strong commitment to employing eco-friendly approaches in their farming operations. They emphasised the importance of protecting their land from potential damage by utilising natural farming methods. This is confirmed by the following participant:

*We grow vegetables and sugar beans for now. We do not have much land, but it is just a sizable one. We are an organic-based agricultural cooperative, and our produce is purely organic. We use river water and borehole water to irrigate our crops year-round. We use natural water and not treated water, which is a good part of life in the countryside (Interviewee 8, 2023).*

This outcome aligns with the findings of Aryal et al. (2020), who note that cooperative participation significantly encourages the adoption of green management practices, such as ecological regulation

and the responsible use of natural resources. Similarly, t et al. (2020) assert that cooperative membership promotes investment in organic amendments, reinforcing participants' commitment to sustainable water usage. This supports the idea that cooperatives can play a pivotal role in fostering environmental sustainability by prioritising natural inputs and eco-friendly farming methods. The practices observed in these cooperatives reflect the growing trend identified by Serra and Davidson (2021), where cooperatives are increasingly recognised for their dual role in economic growth and environmental protection.

Furthermore, rural agricultural cooperatives foster a sense of environmental consciousness and promote sustainable practices within their communities. The participants emphasised that they actively discourage veld fires and highlighted the importance of responsible land management. The following participant, who expressed the same opinion, attests to this:

*The other activity that we promote is to encourage community members not to burn any dry grass and leaves, but instead, use it as compost for our plants. We aim to encourage people to produce organic vegetables for the purpose of promoting health and well-being. (Interviewee 13, 2023).*

This concurs with the findings of Nunan (2022), who emphasizes that sustainable livelihoods must not only increase incomes but also protect the environment. Vuong et al. (2021) note that environmental degradation is often linked to communal decision-making issues, which aligns with the cooperative's collective action in preventing unsustainable practices, such as burning dry grass. The proactive stance taken by cooperatives to discourage harmful environmental practices supports the argument made by Shangase (2022), which stresses the importance of cooperatives in raising awareness and promoting environmentally conscious behaviors within rural communities.

The focus group discussion findings corroborate these interview results, expanding on how cooperatives integrate climate resilience and adaptation into their farming practices. Participants expressed that while their primary goal is to earn a living through food production, they also recognise their responsibility to protect the environment for future generations. This is confirmed by the following:

*We also discourage ploughing in the wetlands and along the rivers as this leads to floods when heavy rains come... We are also teaching our members not to unnecessarily cut the grass and trees to avoid soil erosion... We also harvest water through the use of storage*

*tanks so that during the dry period we have water to use hence protecting and preserving borehole water for human consumption. We don't do anything that can ruin the atmosphere, as we do our best to preserve our natural resources, such as wetland... We maintain vegetation through plants such as bananas, avocados, and other trees that can provide oxygen (Focus Group 1, 3 and 4).*

The discussions from the focus groups further validate the integration of climate resilience and adaptation into cooperative farming practices. The participants' focus on preventing soil erosion and promoting sustainable water management aligns with the work of Mthembu and Nhamo (2021), who highlight the need for agricultural systems that balance economic output with environmental conservation. Likewise, Batool et al. (2023) assert that the efforts to discourage farming along riverbanks and wetlands to prevent flooding reflect broader global concerns about the unsustainable use of land resources. These actions show that rural cooperatives are not only concerned with short-term agricultural success but also with long-term environmental sustainability, ensuring that natural resources are preserved for future generations.

However, the focus group discussions also brought to light some contradictory practices. A few participants admitted to engaging in less sustainable farming methods due to challenges posed by unpredictable rainfall patterns. In response to these challenges, some cooperatives have had to adapt their farming methods and cultivate gardens in valley and wetland areas to sustain their families and communities. This is confirmed by the following participant who conveyed the same opinion:

*Nowadays, rainfall is unpredictable, and most people are suffering from hunger, not because they are lazy, but because we are receiving unstable rains in most cases. So, we are surviving with gardens in the valley and wetland areas. We are managing to feed our families with produce from that wet land even if we get rains that are below average (Interviewee 2, 2023).*

Contradictions emerged when participants discussed their reliance on wetland and valley gardens during periods of unpredictable rainfall. This practice, while necessary for survival, contradicts the findings of Ciruela-Lorenzo et al. (2020), who emphasise that protecting environmental health is crucial for ensuring a green environment for future generations. The participants' actions also contrast with the findings of Aryal et al. (2020), who assert that cooperative participation tends to favor the adoption of green management approaches. While this highlights the complex reality of balancing

food security with environmental sustainability, it suggests that cooperatives may face challenges in maintaining environmentally conscious practices in the face of climate variability. The adaptive strategies employed by cooperatives, though essential for immediate food security, raise important questions about how sustainable these practices are in the long term without additional support or intervention from government programs.

#### **5.4.1.2 Organic and Sustainable Practice**

One significant factor observed in rural agricultural cooperatives is their commitment to organic and sustainable farming practices. The majority of participants highlighted that they prioritise organic farming in their crop production. They actively work towards minimising reliance on toxic chemicals and fertilizers, opting for natural and environmentally friendly methods instead. This was confirmed by the following participant:

*We make sure to limit the use of chemicals in our crops to maintain their natural and delicious flavors. Instead, we prioritise the use of our own manure, which we create through composting. We gather organic waste from our produce and land to create nutrient-rich compost for our farming practices (Interviewee 7, 2023).*

This outcome concurred with the finding of Awoke (2021), who notes that although fertilizers and pesticides can increase yield, their environmental impacts are detrimental. Cooperatives mitigate this by encouraging natural farming inputs like composting and manure, which align with the findings of Ciruela-Lorenzo et al. (2020), who emphasise that cooperative participation enhances investment in organic amendments. This approach not only supports environmental health but also maintains the quality and safety of produce. Firoznia et al. (2021) suggest that rising consumer awareness of organic farming practices is likely to fuel the expansion of sustainable agricultural commodities, indicating a strong alignment between the cooperatives' practices and market trends.

Additionally, participants highlighted their commitment to organic farming methods, emphasising the use of natural inputs such as organic manure and compost to enrich the soil and provide nourishment for their crops. This is confirmed by the following statement:

*In our farming practices, we also utilise manure from cattle, as it is highly beneficial in nourishing the soil. We discourage the use of chemical fertilizers and prioritise the utilisation of natural resources available in rural areas.*

*Preserving our land is of utmost importance to us, and we strive to be environmentally conscious. As both chicken farmers and crop producers, we utilise chicken manure to fertilize our crops, reducing the need for chemical inputs. This approach allows us to protect the environment while producing organic crops at a more affordable cost (Interviewee 7, 2023).*

This sub-theme also addresses the cooperative members' attitude towards vegetation and tree planting, with a focus on ensuring the preservation of natural resources and maintaining biodiversity. Participants actively prioritised the preservation of vegetation and engaged in tree planting activities to enhance ecological balance and protect the environment. This is confirmed by the following participant:

*Regarding the issue of climate, we are committed to preserving our natural resources and minimising any activities that may harm the atmosphere. We take steps to maintain the vegetation in our area, cultivating plants such as bananas, avocados, and other trees that contribute to oxygen production for humans. Additionally, we make efforts to preserve wetlands, recognising their ecological importance (Interviewee 10, 2023).*

This outcome agrees with the findings of Iyer-Raniga and Ho (2020), who found that farmers operating within cooperatives have a greater motivation to employ safe production practices. The use of natural fertilizers like cattle and chicken manure, showcases how cooperatives are harnessing local resources to sustain farming without resorting to chemical inputs. This aligns with the observations of Batool et al. (2023), who stress the importance of striking a balance between human needs and environmental degradation. By reducing the need for chemical fertilizers, cooperatives can protect biodiversity and maintain soil health, as Sebhatu et al. (2021) highlight. The focus on maintaining a natural ecosystem by planting vegetation and trees further supports biodiversity, contributing to both environmental sustainability and climate resilience.

However, one participant felt that there are some limitations in promoting responsible production and environmental management within rural agricultural cooperatives. While a few participants may have engaged in government environmental management programs, there seems to be a lack of a deliberate program within the cooperative movement as a whole. This is confirmed by the following statement:

*I understand your point. It appears that while there may be some individual farmers who have participated in government environmental management programs, there is no deliberate program within the cooperative movement as a whole. You highlight the importance of starting with the management of farming inputs to promote responsible production. However, without proper supply chain management and regulations, it can be challenging to ensure that farmers adhere to responsible production practices (Interviewee 1, 2023).*

This outcome contradicts the findings of Shangase (2022), who concluded that cooperatives with strong social capital are more likely to implement effective environmental management systems. Rashidipour (2020) also emphasizes the need for government support and structured programs to guide cooperatives in adopting environmentally sustainable practices. Iyer-Raniga and Ho (2020) suggest that without adequate external support, cooperatives may struggle to establish a consistent environmental management strategy, potentially hampering long-term sustainability. Therefore, while cooperatives are integral to promoting organic farming, there is a need for more structured and comprehensive support mechanisms to enhance these efforts.

The focus group discussions complement the interview findings by highlighting the practical implementation of organic and conservation farming techniques. The majority of participants indicated that they practice organic farming and implement conservation farming techniques to cope with unpredictable weather patterns. Moreover, the participants expressed that they responsibly use chemicals and provide training to members on their safe application. This is confirmed by the following:

*Well, in my area, we promoted one home, one garden... We use organic manure as they are readily available in rural areas and do adequate land preparation... We work with the environment management department to do some trainings on the use of herbicides and pesticides. We value our land, water, and air, so we always encourage our members to observe these three... We protect land by controlling water with control ridges on our farms... Our government also assists us in that regard (Focus Group 2 and 3).*

This finding confirmed the results from the interviews, where it was found that agricultural cooperatives actively strive to reduce dependence on toxic chemicals and fertilizers, choosing natural and environmentally friendly methods instead. This aligns with Awoke (2021), who found that

although chemical inputs can increase yields, they also pose significant environmental risks. Participants' use of natural techniques, such as control ridges and water conservation methods, is consistent with the findings of Tahat et al. (2020), who argue that sustainable farming involves practices that conserve resources and adapt to environmental changes. As noted in the focus groups, cooperative members also receive training on herbicide and pesticide use, which further supports the cooperatives' commitment to reducing environmental impact, aligning with Sebhatu et al. (2021), who emphasise the importance of education in promoting sustainable agricultural practices.

#### **5.4.1.3 Water Harvesting and Pollution Prevention**

This sub-theme highlighted the proactive measures taken to protect water sources from pollution and to utilise available water resources effectively. The participants mentioned that they practice rainwater harvesting during the rainy seasons to ensure a sustainable water supply. This is confirmed by the following statement:

*We are not very close to the perennially flowing river in our area. So what we do during rainy seasons is harvest water. We have built three tanks where we store water to use during the off-rainy season. We also have what we call water trenches on the upper side of our field that help to maintain moisture in the field for a long period after rainfalls (Interviewee 11, 2023).*

The proactive measures of rainwater harvesting described by participants align with broader literature on sustainable agricultural practices within cooperatives. As noted by Sebhatu et al. (2021), cooperatives often contribute to environmental sustainability by promoting techniques that enhance water conservation and soil quality. This approach is consistent with findings from Aryal et al. (2020), who emphasise that cooperatives can help members adopt practices that preserve water resources while also boosting productivity. Similarly, Qaim (2020) highlights that such sustainable water use practices ensure the longevity of agricultural output while protecting natural resources for future use

Furthermore, the participants expressed a strong emphasis on pollution prevention in their respective areas. They highlighted the adoption of best practices regarding the use of pesticides and other chemicals within their communities. This is confirmed by the following participant:

*We also avoid all different types of pollution, like making sure we burn plastics that are around our land just before the rainy season starts so that they cannot*

*be carried to rivers when the rain starts. All the empty chemical containers are burned just after use. This is part of the land preparation exercise we do as a cooperative, and we encourage members to do the same on their homes (Interviewee 14, 2023).*

This result agrees with Aryal et al. (2020), who found that there is a notable and positive correlation between cooperative participation and the adoption of environmentally-friendly management practices. These practices include ecological regulation, biological and physical control methods, as well as the appropriate and informed use of chemical pesticides. Similarly, Vuong et al. (2021) found that cooperative participation often fosters greater adherence to environmentally friendly practices such as the appropriate use of pesticides and pollution prevention. Moreover, Saz-Gil et al. (2021) found that cooperatives in developing countries are increasingly involved in managing environmental risks through quality control and promoting best practices.

However, one of the participant acknowledged that cooperative members still lacking the technical knowledge on good water management practices. The participant recognised the importance of acquiring skills and knowledge to optimise water use and irrigation techniques. This is confirmed by the following participant:

*We currently rely on river water for irrigation purposes, but we lack modern equipment for efficient watering of our crops. We acknowledge that there is a need for technical knowledge and training to improve our farming practices in this regard (Interviewee 3, 2023).*

This outcome is consistent with the findings of Dendup and Aditto (2020), who highlight that cooperatives must invest in educating their members on modern agricultural practices to fully benefit from sustainable farming techniques. The need for technical training is further supported by Mthembu and Nhamo (2021), who argue that cooperative success is often hampered by a lack of resources and knowledge, particularly when it comes to implementing advanced water conservation methods.

#### **5.4.1.4 Collaboration and Innovation**

This sub-theme examined the significance of collaboration, creativity, and sharing knowledge for sustainable water and land use. Collaboration and innovation in water conservation involve working together, exchanging knowledge, fostering creativity, engaging communities, implementing

initiatives, and evaluating their impact. These elements collectively contribute to the development and implementation of effective strategies for sustainable water use and conservation. Participants felt that collaboration and innovation were necessary to improve on sustainable water and land use. This is confirmed by the following participant:

*We have implemented water systems and initiated a program called HECATOR. Before the COVID pandemic, this program involved visiting schools, universities, and educational institutions to hold competitions. We offered a prize of, for example, R20,000, and invited participants to come up with innovative products that could save water and facilitate irrigation with limited water usage. Young innovators would present their ideas and prototypes through this program (Interviewee 4, 2023).*

This result aligns with the findings of Vuong et al. (2021), who noted that cooperatives often drive innovation by encouraging their members to adopt environmentally friendly methods. Through collective efforts and competitions that incentivise water-saving innovations, cooperatives not only promote efficient resource use but also create opportunities for community-based solutions. Tshishonga (2020) similarly point out that African communities have a strong tradition of collaboration, which plays a crucial role in addressing communal environmental issues through collective action. These initiatives help develop social capital, which, as Pansera and Rizzi (2020) assert, is essential for sustainable agricultural practices and resilience in rural communities.

Another factor highlighted under collaboration and innovation was the collective responsibility for conserving water resources. The participants felt that they are responsible water users as they are engaging in cooperative efforts with others in the community. By collaborating with neighboring farmers and leveraging shared water sources, rural agricultural cooperatives can optimise water usage and promote sustainable agricultural practices. This is confirmed by the following participant who conveyed the same opinion:

*We haven't drilled a borehole as a cooperative, and even if we think of drilling one, it is not proper since the neighbor has one. We were advised that we should not drill many boreholes in a small piece of land since that can affect the water table, so we agreed to rely on the nearby river and the neighbor's borehole if the river dries up (Interviewee 10, 2023).*

This concurs with Holahan and Lubell (2022), who stress the importance of group coordination in managing common pool resources. By sharing water resources and cooperating with neighboring farms, cooperatives ensure that environmental sustainability is prioritised over individual gain. This collaborative approach to resource management supports the findings of Guttman (2021), who emphasises the need for individuals to recognise the collective benefits of cooperation in order to address environmental challenges effectively. Similarly, Raniga (2021) discovered that African communities embraced the concept of collaboration, considering it an integral part of their existence.

**5.4.2 Community support, Communication, Unity, and Shared values**

The primary theme of community support, communication, unity, and shared values emphasised the necessity of mutual support, effective communication, collaboration, shared values, and empowerment. These factors contribute to a favorable environment for cooperative members to improve their livelihoods and contribute to the overall well-being of the rural community.



**Figure 5.5. Sub-themes for main theme 2 (Source: Field work, 2023)**

**5.4.2.1 Empowering Disadvantaged Groups**

This sub-theme sought to establish how agricultural cooperatives often focus on empowering disadvantaged groups, such as women, single parents, widows, youths and individuals living with disabilities. The participants felt a sense of pride, accomplishment, and fulfillment towards uplifting

the disadvantaged people such as women, widows, youths and people living with disabilities. This is confirmed by the following participant:

*We started as single parents, specifically women. Over time, we realised that not only women were in need, but there were also others in our community living humble lifestyles, including those living with disabilities. We decided to accommodate them and opened our doors to various members of the community. Additionally, we are providing opportunities for the youth. We have received emails from students at Durban University of Technology and Umlazi who are studying agriculture and wish to do their practical training with us. We gladly accepted them (Interviewee 10, 2023).*

The findings from the participants demonstrate a clear focus on empowering disadvantaged groups, such as women, youths, and people living with disabilities, through the cooperative model. This aligns with Rena (2021), who emphasises that cooperatives in South Africa have historically been tools for economic empowerment, particularly for marginalised groups. The inclusion of diverse community members, as highlighted by the participants, supports the view that cooperatives are designed to be inclusive, providing a platform for those who are often excluded from mainstream economic activities. Rapando et al. (2021) further assert that cooperatives serve as a vehicle for integrating disadvantaged groups into economic development, as the structure of cooperatives allows for mutual support and collaboration, which is critical for uplifting these communities.

Moreover, some participants mentioned that the cooperative landscape in South Africa is designed to be inclusive and accommodate individuals from all economic backgrounds who have the desire to be members of agricultural cooperatives. The following participant, who expressed the same opinion, attests to this:

*I think the cooperative model effectively addresses the issue of inclusivity by setting low entry requirements that allow anyone to form or join a cooperative. In the case of South Africa, the registration fee for cooperatives has been reduced to 175 South African Rands, with 125 Rands as the registration fee and 50 Rands to reserve the desired name for registration. Considering that the minimum membership per cooperative is five, each member is expected to contribute at most 33 South African Rands for cooperative registration. This*

*minimal entry fee ensures that the cooperative model is accessible to most individuals. Additionally, the availability of grants for cooperatives further contributes to addressing inequities and promoting inclusivity (Interviewee 6, 2023).*

The accessibility of cooperatives through low entry fees and grants, as described by participants, contributes to the inclusivity of marginalised groups in rural areas. Saz-Gil et al. (2021) note that cooperatives lower financial and social barriers to entry, making it easier for individuals from disadvantaged backgrounds to participate. The South African Cooperative Development Policy, along with supportive legislation such as the Cooperatives Act No. 14 of 2005, has been instrumental in promoting inclusivity within the cooperative sector. This aligns with Aryal et al. (2020), who emphasise that reducing financial entry barriers is essential for increasing participation among poor rural populations. The availability of government grants further supports the cooperative model as an inclusive economic tool that promotes shared ownership and responsibility.

However, some participants expressed their perception that the agricultural cooperative landscape does not adequately support the black majority of poor citizens. The participants felt that individuals who are wealthy and politically connected are the ones who benefit the most from cooperative activities. This is confirmed by the following participant:

*I think the agriculture sector in South Africa is still monopolised. Those who benefited from the past regime are the ones who are still controlling the sector, from input production to all stages of value chain. They control seed production, and if they feel there is competition that they don't like, they fight out the production of that seed. This is a national challenge across all sectors, be it crops or livestock. In other words, if you are not part of the cartel, it is difficult for you to succeed. They also have associations with stringent conditions that are very difficult to meet by these poor-oriented cooperatives, and as a result, they cannot join those associations; hence, agriculture will remain the sector of those who benefited from the past systems. We are now twenty-nine years into democracy, but the majority of our people are not yet enjoying the fruits (Interviewee 14, 2023).*

Challenges persist within the cooperative sector, particularly for the black majority and poorer citizens who may not benefit equally from cooperative initiatives. Participants expressed concerns about the monopolisation of the agriculture sector by wealthier, politically connected individuals. Rashid (2019) similarly found that cooperatives in Ethiopia faced issues of mismanagement and political interference, which hindered the participation of poorer groups. In South Africa, as noted by Shangase (2022), the cooperative model is sometimes co-opted by elites, preventing true inclusivity and reducing the effectiveness of cooperatives in empowering the poor. This reflects a broader issue where structural inequalities limit the transformative potential of cooperatives, particularly in sectors such as agriculture, where market access and resource control remain dominated by a privileged few.

#### **5.4.2.2 Communication and Conflict Resolution**

This sub-theme explored how agricultural cooperatives handle communication and conflict resolution among their members. The majority of participants emphasised the significance of maintaining open communication channels and conducting regular meetings to address issues affecting the community. Participants expressed that cooperative members frequently convene to openly discuss challenges, providing an opportunity for all parties involved to express their perspectives. This is confirmed by the following participant, who conveyed the same opinion:

*Whenever there is a challenge, we sit down and talk about it. We have open communication channels with the community and its members. We do have monthly meetings. Other cooperatives may call other cooperative champions or experts like baba (Mr) Muzi and see if they are still in the right direction. We do have some trainings to our members of conflict resolution, but there is not enough because in some cases they deal with general conflict and not specific issues which might be a challenge. But as a cooperative, we are trying to solve such conflicts even through our weekly meetings where we allow such issues to be discussed and try to find common ground. (Interviewee 3, 2023).*

This outcome concurs with the broader literature on cooperative governance and conflict resolution. Pansera and Rizzi (2020) emphasise that clear communication mechanisms are fundamental in preventing conflicts within cooperatives, as they provide members with the opportunity to express their concerns and resolve issues collectively. The participants' accounts of monthly meetings and open discussions support this view, reflecting a strong commitment to maintaining transparency and

ensuring that all voices are heard within the cooperative. Rena (2021) also highlights the role of communication in fostering a sense of trust and unity among cooperative members, which is crucial for the long-term sustainability of the cooperative

The argument put forth by some participants was that cooperatives are legal entities that operate within the boundaries of established laws. These participants believed that unlike informal groups, cooperatives are subject to governance by both national and international laws. This viewpoint is supported by one of the participants who expressed it in the following manner:

*Cooperatives are legal entities, and they are guided by values and principles. One of the values is honesty, and one of the principles is cooperation among cooperatives. When we are honest with one another, we avoid unnecessary conflicts, and again, when we engage each other through meetings and always follow the agreed resolutions made during those meetings, we are avoiding unnecessary conflicts. However, in case we encounter a conflict either among our members or among fellow cooperatives, we have stipulated a dispute resolution mechanism and legal framework. That is the good part of the cooperative movement (Interviewee 3, 2023).*

The legal framework governing cooperatives, as described by participants, further supports conflict resolution by providing structured guidelines and dispute resolution mechanisms. The cooperative's adherence to laws and principles of honesty and cooperation, as emphasised by Rena (2021), ensures that conflicts are managed in an organised and fair manner. This is consistent with Kgobe (2020), who points out that effective internal governance, rooted in legal and regulatory frameworks, is essential for addressing conflicts and promoting collaboration among members. By adhering to these principles, cooperatives not only resolve conflicts but also reinforce their legitimacy and credibility as formal entities. Similarly, ICA (2005) emphasised that the cooperative structure and design evolve through experimentation and are influenced by societal norms, the industrial context, and legal regulations.

On the other hand, some participants highlighted that conflicts initiated by individuals outside of the cooperative present significant challenges and are often difficult to address. These participants felt that the persistence of unresolved conflicts can be attributed to individuals driven by self-centered motives. This is confirmed by the following participant:

*....some conflict are perpetrated by government officials and those one are difficulty to resolve. These officials may give something to one of the members to just to cause havoc if the officials' feels like the movement or a cooperative is strong and is going against their interests. Those are some of the unfortunate incidents we are encountering as cooperative and automatically you find that one member becomes a problem to the cooperative (Interviewee 13, 2023).*

This finding contrasts with the ideal definition of cooperatives provided by Wanyama et al. (2021), who stress that cooperatives are autonomous and democratically controlled by their members. When external forces influence internal dynamics, it undermines the autonomy of the cooperative and creates challenges in maintaining harmony. Shangase (2022) similarly observed that external interference, particularly from politically connected individuals, can disrupt the internal workings of cooperatives and exacerbate conflicts, highlighting the need for stronger governance mechanisms to safeguard cooperative autonomy. Likewise, ICA (2005:n.p) and DTI (2014: 7), which defines a cooperative as “an autonomous association of persons united voluntarily to meet their common social, economic and cultural needs as well as their aspirations through a jointly owned and democratically controlled enterprise”.

Focus group discussions supported these findings, reinforcing the notion that open communication and mutual respect are essential in resolving conflicts. Participants expressed that they believe laws, effective communication, mutual respect, and active engagement are the most appropriate methods to resolve challenges and foster harmony among cooperative members and the community at large. By prioritising these principles, the cooperative not only strengthens its internal cohesion but also contributes to building a harmonious and just social environment that benefits all stakeholders involved. This is confirmed by the following participants:

*On conflict resolution, we are being governed by our constitution. We also encourage open communication, equal treatment, and respect among us as members (Focus Group 1 and 2).*

This was a confirmation of one finding from the interviews, where it was discovered that members of agricultural cooperatives come together and openly discuss their challenges, allowing all parties involved to express their perspectives. This approach is supported by Pansera and Rizzi (2020), who found that accessible dispute resolution processes are crucial for addressing miscommunications and

misunderstandings among members. By actively engaging in these processes, cooperatives can ensure that conflicts are resolved in a manner that promotes collective well-being and strengthens internal cohesion.

#### **5.4.2.3 Equality and Inclusion**

This was an important sub-theme that aimed to assess the treatment of different individuals within agricultural cooperatives. The participants strongly believed in equality, emphasising that both men and women are treated equally within the cooperative. They also stressed the importance of providing equal opportunities to individuals with disabilities and promoting their active participation in decision-making processes. This is confirmed by the following participant who conveyed the same opinion:

*I think that area is doing well at the moment because we can touch on equality for men and women, who are treated equally, and nobody is above the other. We also have some people living with disabilities who come and help us, and we offer them the opportunity to work with others (Interviewee 1, 2023).*

This is consistent with the findings of Papilaya et al. (2021), who highlight that cooperatives, unlike investor-owned firms, operate on egalitarian principles, ensuring that all members have an equal say through the "one member, one vote" system. This democratic governance model helps prevent the exclusion of marginalised groups and promotes the active involvement of all members, regardless of gender or physical ability. The participants' emphasis on providing equal opportunities further echoes the findings of Christian et al. (2024), who identified equity, equality, and mutual self-help as the foundational principles of modern cooperatives.

However, a few participants highlighted that they do not place significant emphasis on who specifically carries out the tasks within the cooperative business. Their main focus lies on the outcomes and results achieved. These participants felt that what matters to them is the successful completion of the tasks, regardless of the individual responsible for their execution. This is confirmed by the following participant:

*We don't operate in that manner; we provide jobs based on competence, without regard to gender. Whether someone is a man or a woman is not a determining factor (Interviewee 11, 2023).*

This focus on competence rather than identity reflects a merit-based approach to cooperative management, which, while seemingly neutral, may overlook the unique challenges faced by disadvantaged groups. Cornwall and Scoones (2022) caution that while merit-based systems are important, they must be balanced with active support for disadvantaged groups to ensure genuine inclusivity. The cooperative model, as discussed by Rena (2021), provides a framework that can accommodate both equality and competence by creating spaces where all members, regardless of their background, can contribute to and benefit from cooperative activities. This ensures that cooperatives remain both inclusive and effective in achieving their economic goals. Similarly, Christian et al. (2024) found that the first modern cooperative was founded on the principles of equity, equality and mutual self-help.

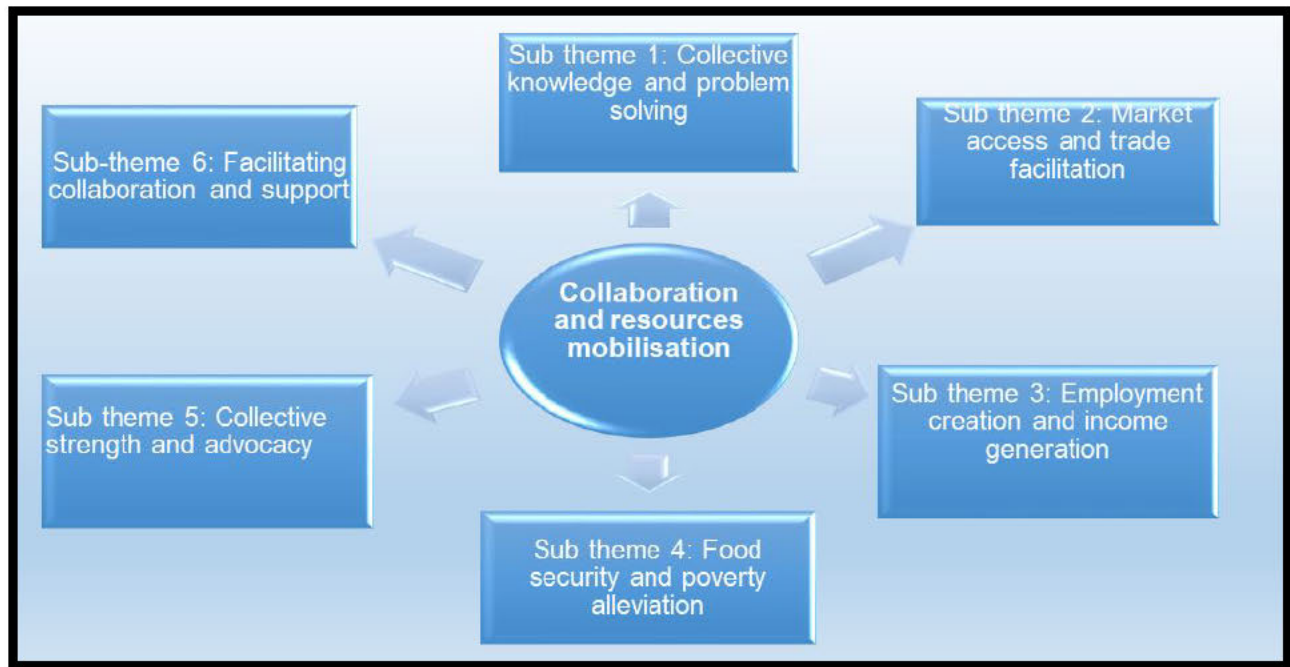
The focus group discussions reinforced these findings, offering additional insights into how cooperatives prioritise inclusivity and social support. The participants expressed that they prioritise equal treatment of all people, irrespective of gender, background, or disability. Most participants indicated their efforts to support disadvantaged individuals, including providing assistance to children from low-income families. This is confirmed by the following participants:

*We have established a policy that, even though we are not affluent, we have a responsibility to assist other vulnerable individuals. Currently, we are actively involved in educating children with disadvantaged parents by providing them with necessary stationary. Additionally, we welcome and support people living with disabilities, offering them opportunities to work alongside others (Focus Group 1, 2 and 4).*

The focus group discussions further reinforced the cooperative's commitment to supporting vulnerable groups, including providing assistance to children from low-income families and welcoming people with disabilities into leadership roles. These practices align with the findings of Cornwall and Scoones (2022), who argue that access to livelihood assets and support from enabling agencies can significantly improve the resilience of vulnerable individuals within cooperative settings. By actively including people from disadvantaged backgrounds and promoting equal treatment, agricultural cooperatives contribute to broader social equity and economic inclusion in rural communities.

### 5.4.3 Collaboration and Resources Mobilisation

This primary theme examined the collaboration and resource mobilisation made by agricultural cooperatives towards the rural community livelihoods in KZN. It was informed by various subthemes summarised in the diagram below;



**Figure 5.6. Sub-themes for main theme 3 (Source: Field work, 2023)**

#### 5.4.3.1 Collective Knowledge and Problem-solving

Cooperatives play a crucial role in facilitating the acquisition of knowledge and skills pertaining to planning, marketing, and collaborative problem-solving in agriculture. They serve as platforms for ongoing learning, allowing members to derive benefits from training programs from various organisations and institutions. This, in turn, enables cooperative members to tackle challenges in a more effective manner.

The majority of participants highlighted that their primary objective for forming and joining agricultural cooperatives was to acquire knowledge that helps them earn a living. The participants felt that participating in cooperatives increases their knowledge, particularly in areas such as strategic planning and effective marketing techniques. This is confirmed by the following participant, who conveyed the same opinion:

*Yes, I wanted to gain knowledge and eradicate poverty. In cooperatives we acquire a lot of knowledge on areas such as how to plan and do marketing. We get training from the department of agriculture and municipality hence help us to solve problems collectively. So, those who wants continual knowledge, cooperatives are the way to go (Interviewee 2, 2023).*

This reflects the findings of Serra and Davidson (2021), who conclude that cooperatives act as platforms where members can access resources such as knowledge, materials, and equipment that allow them to produce high-quality goods. Similarly, Moon and Lee (2020) emphasise the importance of cooperatives as vehicles for both local and international collaboration, allowing members to benefit from the exchange of expertise and resources. This view is supported by Bianchi and Vieta (2020), who argue that cooperatives facilitate the collective sharing of knowledge, ultimately enhancing members' problem-solving capacities and contributing to their agricultural success.

Another significant factor contributing to the formation of agricultural cooperatives was collective procurement of farming inputs. The participants consistently highlighted this approach as a common practice among cooperatives, where members join forces to acquire farming inputs as a group. By pooling their resources and making joint purchasing decisions, cooperatives can take advantage of bulk buying, negotiate favorable prices, and enhance their bargaining power when interacting with suppliers and buyers. This is confirmed by the following participant, who conveyed the same position, supported by the following comment:

*In most cases, because we don't have a lot of land, we use our back yards. That is where we grow our crops and our vegetables, and that is how we survive. We purchase our inputs and sell produce as a cooperative, but previously we used to get inputs supplies from the department of agriculture based in Sidara, but they no longer supply us and we have to stand on our own (Interviewee 7, 2023).*

The practice of collective procurement of farming inputs, as described by the participants, is another significant factor that strengthens cooperatives' ability to leverage resources. By pooling resources, cooperatives can take advantage of bulk buying, negotiate better prices, and enhance their bargaining power with suppliers. This aligns with the findings of Kalogiannidis (2020), who concluded that cooperatives enable members to utilise social capital to access essential commodities and services.

Similarly, Zhang et al. (2021) assert that cooperatives enhance members' ability to procure inputs collectively, which not only reduces individual costs but also strengthens members' bargaining power. Buendía-Martínez et al. (2020) further observe that through collective procurement, cooperatives can lower production costs and achieve better economies of scale, ultimately benefiting the members financially and operationally.

Focus group discussions confirmed that the agricultural cooperatives are centered on the collective efforts and partnership to address various challenges and harness opportunities. Participants from all the four groups indicated that cooperative members joined or formed cooperatives with the objective of combating poverty, creating jobs, ensuring food security, and gaining diverse ideas through teamwork. They aimed to pool resources to create opportunities, fight poverty, and establish food sources for their families and communities. This is confirmed by the following participants:

*We formed our cooperative as a means to assist our community in order to make food available hence we also assisting ourselves with income and earning a living. Also, we wanted to create our own food at a cheaper cost and be in a position to feed our families (Focus Group 2 and 4).*

This was a confirmation of the finding from the interviews, where it was identified that cooperatives play a crucial role in facilitating the acquisition of knowledge and skills pertaining to planning, marketing, and collaborative problem-solving in agriculture. Focus group discussions reinforced the importance of collaboration, where participants highlighted how cooperatives help members tackle poverty, create jobs, and ensure food security by pooling knowledge and resources. This supports the view of Van der Walt (2005), who highlights the historical role of cooperatives in pooling resources to alleviate poverty and create employment opportunities in disadvantaged communities. Christian et al. (2024) also argue that cooperatives are central to rural development by promoting collective action, which helps individuals and communities enhance their livelihoods. Moreover, Manda et al. (2020) found that cooperatives play an essential role in tackling rural poverty by providing a collaborative space where members can share resources and ideas for the benefit of the wider community.

Moreover, focus groups discussion found that the cooperatives collaborate with government and non-governmental organisation to secure training, support, and resources to improve their farming practices and solve problems collectively. The cooperative's focus on teamwork, unity, and resource

pooling enabled them to efficiently utilise idle and under-utilised resources for agriculture, contribute to the community's well-being, and promote self-sufficiency. Participants agreed that this collaboration facilitated access to vital resources such as land, funding, and seeds, empowering both young and elderly individuals to work together for the benefit of their rural communities. This is confirmed by the following participants who conveyed the same position as confirmed by the following verbatim:

*We identified land lying idle in our area, and we realised they may end up being misused as dumping areas, causing pollution in the environment, so we then decided to use these places to grow food and keep ourselves busy since we are unemployed and educated. You know, when you do things together, it is like a family cooperative, and we wanted to put our resources together for the benefit of us and the community (Focus Group 1 and 4)*

This reflects the findings of Serra and Davidson (2021), who found that participation in cooperatives enables members to access external support systems, allowing them to enhance agricultural productivity and foster sustainability. Buendía-Martínez et al. (2020) and Kayongo et al. (2022) further highlight the importance of such partnerships in fostering rural development and ensuring the long-term viability of agricultural cooperatives. These partnerships not only help cooperatives secure critical resources but also enable them to implement best practices, thus contributing to improved agricultural outcomes and community development.

#### **5.4.3.2 Market Access and Trade Facilitation**

The markets access was a crucial factor in the establishment of agricultural cooperatives. Certain cooperatives have undergone registration processes to become authorised suppliers of fresh produce to larger markets, supermarkets, and even specialised buyers like hospitals and other government institutions. While many cooperatives primarily focus on meeting the needs of the local community, there are noteworthy cases where cooperatives have forged agreements or partnerships with prominent markets and institutions to market and sell their agricultural products.

Some participants highlighted that their cooperatives have trade agreements with certain institutions, which would not be possible if they were not registered cooperatives. This is confirmed by the following participant:

*Generally, they individually source their own market, although we do have a few who are registered to supply fresh produce to supermarkets and other markets. We also registered others in the Durban fresh market, although the majority of our cooperatives are failing to meet the requirements in terms of quantities and quality. Other markets are made between the cooperatives as suppliers and buyers within their own conditions without the involvement of the cooperative movement structures (Interviewee 6, 2023).*

This result was consistent with the results of Tshishonga (2020), who discovered that by working together, these cooperatives can access larger markets, negotiate better terms with buyers, and benefit from cost savings in areas such as advertising, packaging, transportation, and distribution. The primary goal of marketing cooperatives is to enhance the market power of their member businesses by pooling resources, coordinating efforts, and leveraging economies of scale. However, Chiwawa et al. (2021) noted that marketing and supply cooperatives can take various forms, such as agricultural cooperatives, producer cooperatives, or consumer cooperatives, depending on the nature of the industry and the participants involved.

Moreover, it was evident that the local community plays a significant role as the major customers for these cooperatives. Participants highlighted that the community members, households, schools, and local shops are key consumers of the cooperative's produce. This is confirmed by the following participant who conveyed the same opinion:

*The local people are our major customers, and these include schools, local shops, and government employees. We used to supply some produce to urban areas to places such as Durban Fresh Produces, but we failed to meet the demand since the majority of our produce is consumed locally, and we opted to supply the locals since it is cheaper and more convenient (Interviewee 12, 2023).*

This result was in line with that of Mathinya et al. (2022), who noted that, while small-scale farmers play a crucial role in local food systems, it is widely acknowledged that their productivity per unit of land falls below that of large-scale farmers. On the other hand, Ciruela-Lorenzo et al. (2020) observed that cooperatives help to build trust among members and between members and their stakeholders, which strengthens the business and community. Because cooperatives generate

economic, human, and social capital, they are often the chosen business model for locally based, locally controlled community development.

Furthermore, focus group discussions underscored the importance of local community involvement for agricultural cooperatives expansion into larger markets to enhance the sustainability of rural livelihoods. The participants agreed that cooperatives primarily target the local community as their major customers, selling their produce directly to households, schools, and neighbors. Additionally, they expressed that they collaborate with street vendors and urban markets to sell surplus produce, thereby expanding their reach and impact beyond their immediate rural surroundings. This is confirmed by the following participants:

*Our major customers are individual customers and just recently we made an agreement to supply produce to the hospital... The major customers who can buy our vegetables are the local community, schools, and clinics. Local community, including households, schools, and all those surrounding the project... (Focus Group 1, 3 and 4).*

This finding corroborates the results from the interviews conducted, which revealed that agricultural cooperatives have formed agreements or partnerships with prominent markets and institutions to efficiently market and sell their agricultural products. This result aligns with the findings of Manda et al. (2020), who observed that small-scale farmers benefit from joining cooperatives either due to their lack of negotiation leverage or because the opportunity cost is too low. Additionally, Manda et al. (2020) state that belonging to a cooperative benefits large-scale farmers by enabling them to leverage processing and marketing scale economies.

#### **5.4.3.3 Employment Creation and Income Generation**

Another important factor contributing to the significance of rural agricultural cooperatives was the creation of employment opportunities for community members. Cooperatives actively engaged in hiring individuals from the local community, both in voluntary and paid positions, to fulfill diverse roles within the cooperative framework. This emphasis on employment not only enhances economic prospects but also strengthens community involvement and empowerment within the agricultural sector.

Participants indicated that cooperatives play a vital role in creating job opportunities within the agricultural sector in rural communities. Through collaborative efforts and resource pooling,

cooperative members establish sustainable enterprises that not only generate income for themselves but also create employment opportunities for others. This is confirmed by the following participant:

*Of course, our members have something to do that brings food to their table. Like I said before, the idea of forming a cooperative came after I lost my job due to a disability and discovered that I was no longer ready to work under someone, so I decided to be my own boss. So, yes, we are creating jobs for our members and empowering them. However, we are not just limited to our families when we are employing people; we also consider every community member who can be in a position to positively improve our cooperative (Interviewee 9, 2023).*

This aligns with the findings of Buendía-Martínez et al. (2020), who noted that cooperatives are key contributors to job creation in rural areas, helping to alleviate poverty by offering sustainable employment opportunities. Candemir et al. (2021) also emphasised that cooperatives serve as vital mechanisms for community empowerment through employment creation, particularly in economically marginalised areas. Furthermore, ILO (2017) found that cooperatives generated approximately 16 million direct jobs across 15 African countries, underscoring their critical role in employment generation.

Moreover, the study identified that, another significant factor of rural agricultural cooperatives was the diverse nature of earnings received by members. The participants revealed that, cooperative activities often result in compensation that goes beyond monetary rewards. Instead of cash, members may receive produce or items sourced directly from the cooperative's fields. This is confirmed by the following participant who stated:

*It is so hard to say how much we are earning per month because at times we give each other produce from our field and not money. If we get let say R5000, we divide the amount equally and our policy is to give each member 10% of the surplus. So, it depends on what we are doing at that moment. You cannot really understand what you are earning every time. As I said, at times we will take some items and not cash. However, on a good month, we can earn around R7000 per month each (Interviewee 5, 2023).*

This view is supported by Serra and Davidson (2021), who highlighted that cooperatives often provide their members with both financial and non-financial benefits. Members may receive agricultural produce or other goods, which contribute to their household food security and overall well-being. Rapando et al. (2021) similarly found that in Kenya, 80% of the population derived income or other forms of livelihood from cooperative activities. This underscores the transformative role of cooperatives in rural economic development, providing essential resources to members beyond cash compensation. Miller (2021) also observed that cooperative activities contributed to improved livelihoods by increasing access to essential resources, even when monetary compensation fluctuated.

Additionally, the focus group discussions supported these findings but added a detailed view of income variability and reinvestment practices within cooperatives. Participants indicated that the amount of these benefits fluctuates based on various factors, such as weather conditions and the growth stage of the cooperative. This is confirmed by the following participants:

*Currently, we are not making any profits as whatever money we generate is reinvested back into our cooperative, particularly since we are still in the initial stages of development. In terms of cash returns, it is not substantial, and we can estimate it to be around +/-R500 per month, depending on the season. During periods of low rainfall, the income may be even lower (Focus Group 2).*

This was inconsistent with the findings from the interviews, where it was found that besides other benefits, cooperative members were earning substantial income at the end of every month from agricultural activities. This finding aligns with Zhang et al. (2021), who found that rural cooperatives face significant income fluctuations due to external factors such as climate and market conditions. Fernandez-Guadaño et al. (2020) also observed that income reinvestment strategies are common among cooperatives, with members prioritising long-term sustainability over immediate financial gains. Reinvestment into cooperative infrastructure and operations ensures that cooperatives remain viable and can continue to provide benefits to their members. Fahad et al. (2023) further noted that cooperatives contribute to sustainable livelihoods by offering both tangible and intangible benefits, such as knowledge sharing and collective resilience.

However, the majority of focus groups participants agreed that members of rural agricultural cooperatives are not receiving significant financial benefits from their cooperatives. Instead,

members often receive non-monetary benefits, such as taking produce from their farming activities. The participants claimed that some of the income generated from cooperative business is reinvested back into the cooperative for its development and sustainability. Simultaneously, it serves as a supplementary source of income for members, especially during difficult times. This is confirmed by the following participants.

*It is indeed challenging to put a precise monetary value on the benefits at times, as some members may take vegetables or other produce directly from the cooperative. However, it can be estimated that a person may receive something around R500 to R1500 per month in financial benefits from the cooperative (Focus Group 1 and 3).*

This was a confirmation of one finding from the interviews where it was established that cooperative activities often result in compensation that goes beyond monetary rewards. This finding was supported by Fahad et al. (2023) study on the sustainable livelihoods framework, which suggests that the concept of rural livelihood is not defined in a monetary way, but includes other dimensions that are embedded in people's access to assets. Candemir et al. (2021) asserted that cooperatives should be central to poverty alleviation efforts, especially in rural areas where formal employment is limited. Zhang et al. (2021) similarly argued that agricultural cooperatives can play a pivotal role in reducing poverty, but only if supported by robust government policies. Kayongo et al. (2022) also highlighted the need for government collaboration with cooperatives to maximise their potential in addressing rural unemployment and promoting income generation. Thus, while the interviews portrayed the cooperatives as a significant source of employment and income, the focus group discussions detailed this by revealing the challenges associated with income variability and reinvestment strategies.

#### **5.4.3.4 Food Security and Poverty Alleviation**

The agricultural cooperatives play a crucial role by fostering professional farming practices and ensuring a reliable food supply. The participants felt that through their collective efforts, livelihoods are improved, and food security was enhanced within their community. By working together, sharing resources, and upholding shared values, participants highlighted that they strengthened the community's ability to combat poverty, alleviate hunger, and address nutritional challenges. This is confirmed by the following participant:

*It will minimise poverty, hunger, and malnutrition, thereby promoting good health. I always have enough food at home—vegetables, chickens, and mealie*

*meal—because of this cooperative. Remember, our work is to produce food; that is our work, nothing else. So, I am assured that I will never suffer from malnutrition, and I also eat quality, fresh food (Interviewee 1, 2023).*

This outcome concurs with the findings of Serra and Davidson (2021), who discovered that cooperatives in Ethiopia contribute significantly to poverty reduction programs and development initiatives. Similarly, Christian et al. (2024) indicated that cooperatives in South Africa, especially in marginalised communities, play a crucial role in poverty alleviation by creating employment and supporting food security initiatives. Additionally, Papilaya et al. (2021) indicated that cooperatives help to ensure food security by enhancing the availability of fresh produce. Similarly, Serra and Davidson (2021) highlighted how cooperatives contribute to poverty reduction by providing consistent access to nutritious food for their members. Candemir et al. (2021) also emphasised the importance of cooperatives in creating a sustainable food supply chain, especially in rural areas where food insecurity is more prevalent.

Furthermore, agricultural cooperatives placed a high priority on ensuring food supply for the families of their members. The participants expressed a clear and unwavering understanding that the primary goal of agricultural cooperatives is to produce food for the families of their members. They recognised and embraced the collective responsibility to ensure that every member has access to an adequate food supply. The following participant, who expressed the same opinion, attests to this:

*We agree that we are not going to give dividends now until the project gets settled. But we make sure that every member has food to eat at the end of the day. Our cooperative is comprised of women, and the majority of them are single mothers, so our desire is to feed the family, and I'm happy we are managing that. So currently we are giving each other part of our produce and something we add, like R500 per month, as an allowance. What is important at home is food before everything else, and I am happy our children are healthy and are eating something every day (Interviewee 9, 2023).*

This is consistent with Zhang et al. (2021), who argued that cooperatives go beyond mere food production by ensuring food security and nutritional stability for their members. Kayongo et al. (2022) also noted that agricultural cooperatives contribute significantly to global food security initiatives by ensuring that smallholder farmers have access to resources that boost food production.

Christian et al. (2024) reiterated the multifunctional role of cooperatives in promoting sustainable farming practices while addressing malnutrition and food insecurity.

The focus group discussions strengthen these insights, with participants expressing how cooperatives provide non-monetary benefits, ensuring food access during challenging times like droughts or food shortages in individual households. This is confirmed by the following participants:

*...a person can receive approximately +/-R500 per month. If I don't have any food at home, I take food from the cooperative, and on average, I can estimate that these provisions amount to around R500 per month. It is challenging to provide an exact figure, but I can confidently say that this helps us make a living (Focus Group 3 and 4).*

This was a confirmation of one finding from the interviews, where it was found that collective efforts improve livelihoods and enhance food security within the community. This perspective aligns with Moon and Lee (2020), who found that cooperatives increase resilience to food shortages by pooling resources and sharing knowledge among members. Buendía-Martínez et al. (2020) also suggested that cooperative models can provide a safety net for vulnerable populations by ensuring continuous access to food, even in times of crisis. Ciruela-Lorenzo et al. (2020) added that cooperatives build social capital, which facilitates mutual aid during difficult times, promoting food security and social cohesion within communities.

Further, the focus group discussions highlight how agricultural cooperatives promote self-sustainability and active member participation in addressing poverty. Majority of the participants expressed that they joined or formed agricultural cooperatives with the aim of fighting poverty. They achieve this through producing and distributing affordable nutritious food within their communities. The participants indicated that through collective contributions and financial participation, they funded their projects and operational costs. This is agreed by the following participants who conveyed the same as indicated through the following quotes:

*We sell our produce to the community, and they are surviving on our products, hence fighting hunger among the community. However, we are encouraging both men and women to form cooperatives so that they can easily produce their own food. We are using our contributions to fund our projects. Yes, we get external support here and there, but we are relying much on member contributions to fund our activities. Also, members are paid according to their participation in the cooperative (Focus Group 3 and 4).*

This was a confirmation of one finding from the interviews, where it was identified that agricultural cooperatives have no obligation to only fight poverty, as their primary concern is the economic empowerment of their members. By producing and distributing affordable and nutritious food within their communities, cooperatives are tackling hunger and improving nutritional outcomes. Dipierri and Zikos (2020) found that cooperatives facilitate collective action, which enables communities to improve their food systems and contribute to long-term food security. Atmadja et al. (2021) concluded that through collaboration and shared goals, cooperatives empower communities to take control of their own food production, creating a ripple effect that enhances economic growth and food availability. Ma et al. (2021) also noted that cooperatives are crucial in mobilising local resources and addressing systemic barriers to food access, thereby contributing to the overall well-being of rural populations.

However, one participant argued that agricultural cooperatives have no obligation to fight poverty as their primary concern is the economic growth of their cooperative, and they believed that the responsibility for poverty eradication lies with the government. This is confirmed by the following participant:

*Poverty is a significant issue, and the government is actively addressing it. While we, as individuals or non-governmental organisations, may not have the capacity to solve it entirely, we do what we can. Whenever we have surpluses, we provide assistance to those in need. Our efforts, while limited, complement the government's initiatives in tackling this pressing issue (Interviewee 9, 2023).*

This contradicts the findings of UN (2017), which concluded that agricultural cooperatives have the potential to reduce poverty through collective economic empowerment. Serra and Davidson (2021) emphasised that cooperatives can significantly contribute to poverty reduction and food security, but only when supported by adequate policies and resources. Zhang et al. (2021) also advocated for stronger government and cooperative partnerships to ensure that cooperatives can realise their full potential in promoting food security and alleviating poverty.

#### **5.4.3.5 Collective Strength and Advocacy**

Individuals can achieve common objectives that would be difficult to achieve on an individual basis by banding together as a cooperative. Participants felt that cooperatives empowered them to engage

in advocacy efforts, such as lobbying the government for a supportive cooperative environment, advocating for favorable policies, and negotiating improved terms with markets and buyers. This is confirmed by the following participant who conveyed the same opinion:

*So, there are a lot of benefits, some economic, some social, and some administrative. As much as I can complain, the government is giving varsity markets in terms of cooperative products. Government is one of our huge markets as cooperatives. We managed to convince the government to allow cooperatives to supply hospitals with farm produce, but I can tell you that as cooperatives, we are failing to supply this market. It is upon us as cooperatives now to be organised and find ways of coordinating ourselves to explore that market (Interviewee 15, 2023).*

This finding aligns with Schwettman (2023), who concluded that cooperatives, by working together, can access larger markets, negotiate better terms with buyers, and enjoy cost savings in areas such as advertising, packaging, and transportation. Additionally, Manda et al. (2020) highlight that small-scale farmers benefit significantly from joining cooperatives, as their limited individual leverage in the marketplace can be overcome by collective bargaining power. The ability of cooperatives to pool resources and advocate for members' interests enhances their influence on policy and market access. Similarly, Billiet et al. (2021) found that cooperatives generate social capital, which further strengthens their ability to advocate for improved conditions.

However, a few participants expressed their belief that the government was not supportive of agricultural cooperatives. They indicated that the cooperative sector faces challenges due to less supportive government policies. These participants emphasised the desire for greater self-sufficiency and autonomy within the cooperative movement, seeking alternative avenues to sustain and advance their cooperative initiatives. This is confirmed by the following participant:

*They are very few benefits we can talk about. This is because the government does not make the environment conducive for cooperatives as much as possible. Also I think we need to create cooperatives that are independent and not dependent very much with the government. But what I can say is there is power in numbers, what individuals are failing can be easily achieved which a collective effort (Interviewee 4, 2023).*

This perspective is supported by Raniga (2021), who argues that cooperatives should strive to be independent from government and external forces such as NGOs or development agencies, focusing on self-help and member-driven initiatives. This outcome also aligns with Mushonga et al. (2019), who noted that during the colonial era, white-owned cooperatives benefited from significant government support, which helped them dominate the agricultural sector. However, the legacy of these systems has left newer cooperatives, especially those formed by previously marginalised communities, struggling to gain similar levels of support. Bianchi and Vieta (2020) similarly argue that cooperative sustainability should be driven by member control and community-based strategies rather than over-reliance on government intervention.

#### **5.4.3.6 Facilitating Collaboration and Support**

Another function of agricultural cooperatives was to promote cooperation among their members through various means. The participants emphasised that they cooperate with each other through exchange visits, conducting regular meetings, and organising training sessions. These activities serve as platforms for cooperative members from different entities to come together, discuss shared challenges, and develop collective solutions. This is confirmed by the following participant who conveyed the same opinion:

*We are guided by 'ubuntu' which means our culture is very instrumental and it is part of the cooperative. This is how we raised from our childhood, we were taught to cooperate with fellow brother and sister. We also have the principle of concern for the community. And I think these two principles are assisting us quite a lot particularly the principle of cooperation among cooperatives. So, we do have exchange visits and weekly meetings whereby members from different cooperative are meeting deliberating on their different challenges and find common solutions to address such challenges (Interviewee 14, 2023).*

This is consistent with the findings of Billiet et al. (2021), who stress that cooperatives build social capital by promoting member interaction, training, and knowledge exchange. These exchanges improve cooperative efficiency and address shared issues. Similarly, Bianchi and Vieta (2020) argue that cooperatives improve their operational effectiveness by fostering local, national, and international collaborations, which enable them to serve their members better. Jackson (2021) add that these partnerships enhance cooperatives' capacity to overcome challenges by pooling resources and skills, ensuring greater resilience and adaptability.

Moreover, cooperatives uphold the principle of cooperation among cooperatives, prioritising mutual support and synergy over competition. Participants highlighted that they actively seek partnerships with other cooperatives, local community leaderships, external organisations and institutions to enhance the capabilities and success of their members. This is confirmed by the following participant:

*We encourage them to do what we call cooperatives are not in competition but complement one another. So, we encourage cooperation among cooperatives so that they can discuss whatever their challenges are among themselves. We also carry out some training with all cooperatives on good corporate governance. With the support of the municipality, we are meeting our cooperatives every Wednesday to deliberate on challenges and possible ways to make cooperatives very successful. We also work with the t to train different types of programs to ensure that our members are fully equipped (Interviewee 6, 2023).*

This outcome aligns with the findings of Bianchi and Vieta (2020), who argue that cooperative collaboration helps pool economic, social, and political resources, enhancing cooperative resilience and adaptability. The principle of cooperation among cooperatives, outlined by the International Cooperative Alliance (ICA, 2005), emphasises solidarity and mutual aid as essential for cooperative success. Additionally, Serra and Davidson (2021) assert that cooperative success depends on collective governance and collaboration, which ensure that cooperatives remain community-focused rather than solely profit-driven.

Additionally, cooperatives demonstrated their concern for the community by engaging in social activities and making contributions to community initiatives, such as supporting schools, churches, and social reform centers. The participants felt that these actions not only promote cooperation within the cooperative but also foster a positive relationship between the cooperative and the broader community. This is confirmed by the following participant who conveyed the same opinion:

*We are working with the local leadership to address local challenges, and when the community is making some contributions towards some challenges, be they funerals, we make sure we make a contribution as a cooperative so that people appreciate the beauty of cooperatives and collectiveness. Recently, we made a*

*contribution towards the roofing of a certain church building. We understand that if the community knows about us and has good relations with us, it will help us get protected from thieves and even bring us more customers (Interviewee 10, 2023).*

This finding is consistent with Ciruela-Lorenzo et al. (2020), who assert that cooperative engagement in community initiatives builds trust and strengthens the relationship between cooperatives and external stakeholders. Billiet et al. (2021) further emphasise that this involvement fosters social cohesion by building networks of mutual support, while Bianchi and Vieta (2020) highlight how cooperative contributions to community welfare help strengthen community ties and enhance cooperative sustainability through collective trust and goodwill.

Furthermore, the focus group discussion findings supported these interview results, adding depth to the understanding of collaboration and networking within cooperatives. The majority of participants in the focus groups emphasised that cooperative training and teamwork have been critical in accessing markets and resources, thus benefitting both members and the community. This is confirmed by the following participants:

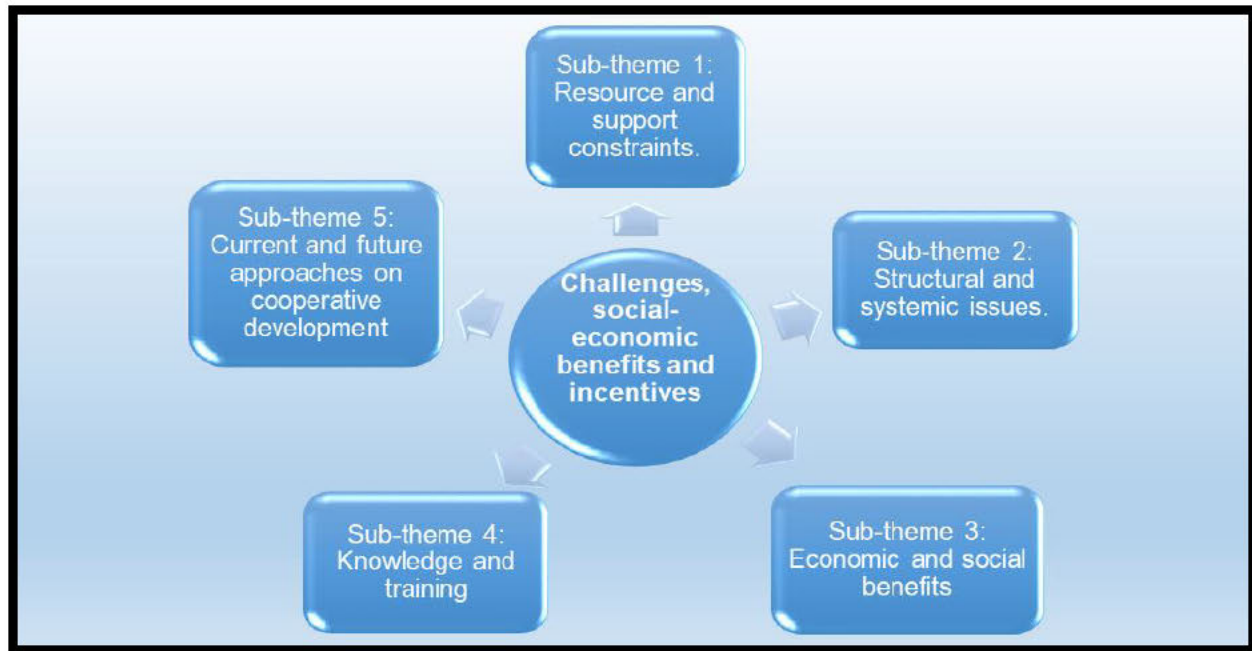
*Also, out there, the market is there, but with stringent conditions that also want us to be more organised... Even though we had disappointed our customers due to lockdown issues and other reasons, we reached agreements with some supermarkets on the North Coast, as well as with the local community surrounding us. Additionally, we closely collaborate with secondary cooperatives responsible for market sourcing, coordination, and distribution. (Focus Group 3 and 4).*

This was a confirmation of one finding from the interviews where it was discovered that agricultural cooperatives actively seek partnerships with other cooperatives, local community leaderships, external organisations, and institutions to enhance the capabilities and success of their members. This aligns with the findings of Ma et al. (2021) who argue that government and private sector support is essential for cooperatives, as these external actors provide the policy framework, services, and infrastructure needed to support cooperative success. Fernandez-Guadano et al. (2020) also stress that cooperation among cooperatives helps overcome market barriers and secure essential resources, leading to greater economic sustainability. Wang et al. (2021) add that these collaborations are vital

for ensuring that cooperatives meet both community needs and market demands, fostering long-term growth.

#### 5.4.4 Challenges, Social-economic Benefits and Incentives

This primary theme was of significant importance as it examined into both the challenges and problems faced by cooperatives, as well as the potential opportunities and strategies to achieve goals and foster cooperative growth.



**Figure 5.7. Sub-themes for main theme 4 (Source: Field work, 2023)**

##### 5.4.4.1 Resource and Support Constraints

There was a plethora of challenges experienced by agricultural cooperatives. These challenges include an aging membership, insufficient access to equipment, water scarcity, limited financial support, and difficulties in acquiring land.

Participants strongly believed that age poses a significant threat to the development of agricultural cooperatives, and there was a lack of adequate support for young people in agricultural cooperative development. This sentiment is corroborated by the following participant:

*Most people who are agricultural cooperative members are getting older; for example, I am now 72 years old. The oldest member in our group is 90 years old, and the youngest member is now 51 years old. So, now that is the challenge.*

*We are not supporting youths to form cooperatives as much as possible. Another challenge is equipment. We have no equipment because we cannot use hoes to work on 5 hectares, and we need tractors and advanced machines. These young generations don't want to do manual work, so they want machines. (Interviewee 11, 2023).*

This finding is consistent with Francesconi and Wouterse (2021), who argue that youth involvement is critical to the future of cooperatives, particularly in Africa, where aging farmers dominate the agricultural sector. The lack of incentives and modern equipment discourages youth participation, exacerbating the issue of an aging membership. The challenge of inadequate youth engagement reflects broader trends across the continent, where limited access to resources, such as technology and financing, prevents younger people from taking active roles in agriculture. Similarly, DTI (2015) acknowledged that the South African government supports cooperative development as a means to generate employment and alleviate poverty, particularly among historically disadvantaged groups such as blacks, rural residents, youth, women, and individuals facing health challenges.

Lack of modern farming equipment and limited access to financial support emerged as significant challenges encountered by agricultural cooperatives. Participants strongly believed that relying solely on manual labour becomes impractical and unproductive, while the difficulties in accessing finance for their farming activities pose a great obstacle. This viewpoint is supported by the following participant's statement:

*Our competitors are far ahead of us, and they have machinery and equipment to do the farming and they cannot wait for the rain to grow their crops because they have irrigation systems, trucks, tractors, and every piece of equipment that they might need. As a black woman who has nothing, I have started out to nothing. I need to wait for the rain to plough and grow crops. I do not have a tractor. I have no money to buy seedlings or seeds but if I need help, I must produce a list of assets as collateral. Where do you think a poor African can get such assets? It is a bit tricky, so I decided not to encourage anyone to form a cooperative. To be in the agricultural sector means you need to work, do something that will give you money on your own (Interviewee 8, 2023).*

This result conflicts with the findings of Francesconi and Wouterse (2021), who concluded that when smallholders join African agricultural cooperatives, they gain access to subsidised inputs and services from donors and governments, including mutual assistance for activities such as cultivation, harvesting, and other labor-intensive tasks. Similarly, the lack of access to modern farming equipment and financial support has been identified as a major barrier to the growth of agricultural cooperatives. Serra and Davidson (2021) confirm that without sufficient capital, cooperatives struggle to compete with larger, mechanised farms that have access to advanced equipment. This outcome also aligns with Christian et al. (2024), who emphasise that the lack of access to financial resources and machinery continues to hinder the development of smallholder cooperatives in South Africa. The difficulty in securing loans or grants further complicates the ability of cooperatives to modernise their operations, leaving them reliant on outdated practices.

Moreover, participants emphasised the issue of high dropout rates among members as a significant challenge, impeding the continuity and overall success of agricultural cooperatives. This is confirmed by the following participant who stated:

*Another big challenge for agricultural cooperatives is high drop outs of members which eventually leads to failure of most cooperatives. There are opportunities, you know, it is just that it is something that is beyond our control now, because if you are a cooperative, you must look at the number of people. There is power in numbers, so if they can get an open door then they would require support. You know agriculture is labour intensity in nature and without active members, we are going nowhere. We started in 2016 with twelve members and seven fell along the way, we are now five (Interviewee 14, 2023).*

This outcome mirrors the findings of Ma et al. (2021), who argue that without sufficient member retention, cooperatives cannot harness the full potential of collective efforts. DTI (2018) reported that the failure rate of cooperatives in South Africa is exacerbated by a lack of governance structures and the challenges of maintaining active member engagement. The reduction in membership weakens cooperatives' capacity to carry out labor-intensive tasks, thus jeopardising their productivity and sustainability. Additionally, Christian et al. (2024) suggest that the cooperative regime in post-apartheid South Africa may have been unsuccessful.

However, the focus group discussions offered an alternative perspective, particularly in relation to the inclusivity of cooperative membership. While the interviews focused on challenges such as lack of youth involvement and resource constraints, focus group participants emphasised the low entry requirements for cooperatives and the availability of government grants as mechanisms that promote inclusivity. This inclusivity contributes to reducing inequalities and promoting justice within the community. This is confirmed by the following participants:

*I think the model of cooperatives addresses that because the entry requirements are so low that everyone can manage to enter or form a cooperative (Focus Group 4).*

This was a refutation of one finding from the interviews under, where it was established that young people are failing to participate in agricultural cooperatives due to a lack of adequate support for young people who lack financial stamina. On the other hand, the findings concurred with Ma et al. (2021), who argued that institutions, policies, and laws are crucial and effectively influence access to and conditions of exchange between various forms of capital, as well as the returns on any particular livelihood plan.

#### **5.4.4.2 Structural and Systemic Issues**

Some participants strongly emphasised the gap in government support and expressed their disappointment with unfulfilled promises regarding agricultural cooperatives. This viewpoint is reinforced by the following participant's comment:

*Sometimes we work hard and get nothing. The challenges might be from the government, they make empty promises, and nothing will be materialises most of the time, and it is so discouraging. We have two or three departments who are dealing with agriculture. So, if you need something, they will say go to agriculture, if you go to agriculture, they will say no, go to municipality. Under municipality there are three sections. All of them deal with the agriculture business. You will end up not knowing where you are supposed to go and do, you travel with the money, but nothing materialises. This you ended up being a loser (Interviewee 11, 2023).*

This challenge reflects broader issues identified by Schwettman (2023), who noted that cooperatives across Africa often rely heavily on government support, leaving them vulnerable to inefficiencies and mismanagement within public institutions. The inability of cooperatives to receive adequate

assistance from government departments, as described by participants, undermines their capacity to grow and meet their objectives. This outcome aligns with the findings of Francesconi and Wouterse (2021), who argue that weak institutional support often hinders cooperative development, particularly in rural areas where access to resources is already limited.

Furthermore, certain participants underscored that the monopolisation of the agriculture sector presents an additional challenge for members of agricultural cooperatives. Participants felt that they continue to face marginalisation within the agricultural sector as a result of the remnants of the past government system that have yet to be fully addressed. This sentiment is confirmed by the following participant who conveyed the same opinion:

*If we examine the support provided to cooperatives before 1994, it becomes evident that the assistance was biased towards white-owned cooperatives, who received preferential treatment. They were granted loans, tractors, seeds, and managerial support, to the extent that even in the face of failure, they continued to receive ongoing support. However, the challenge that arose after independence is that these white farmers, who benefited from pre-independence support, still dominate the means of production and the agricultural value chain (Interviewee 4, 2023).*

This ongoing imbalance reflects the findings of Christian et al. (2024), who argue that the legacy of apartheid continues to shape the agricultural landscape in South Africa, with white-controlled cooperatives maintaining dominance over key resources and production means. The disparity in support before and after 1994 has left historically marginalised communities struggling to compete in a sector still heavily influenced by past inequalities. Deng et al., (2020) also emphasise that cooperatives were envisioned as a tool for correcting these imbalances, yet they continue to face structural barriers that limit their effectiveness in promoting economic inclusivity.

Moreover, participants highlighted several structural challenges faced by agricultural cooperatives. These challenges encompassed difficulties in accessing export markets and the perception of people towards cooperatives. Some participants expressed that the general public does not understand cooperatives as business organisations but rather views them solely as poverty eradication initiatives. This perspective was confirmed by the following participant, who shared the same opinion:

*The major challenge is the mindset of the majority of our people, who still perceive agricultural cooperatives as being exclusively for the poor and marginalised. Another challenge is that even if you intend to export your products, obtaining space at the port is difficult as it is often reserved for members of certain associations. It is not easy to secure a container for your products from any freight company, as they frequently claim to be fully booked (Interviewee 7, 2023).*

The view that cooperatives are exclusively poverty alleviation initiatives rather than legitimate business enterprises reflects a broader misconception that hinders their growth. Schwettmann (2023) similarly found that this perception has contributed to the declining market share of cooperatives in industries such as coffee in East Africa, where larger conglomerates are perceived as more credible. The difficulty cooperatives face in accessing export markets, as mentioned by participants, exacerbates this challenge. ICA (2007) defines cooperatives as businesses designed to meet the economic and social needs of their members, but the failure to recognise cooperatives as viable economic players limits their ability to expand into lucrative markets.

The focus group discussions supported the interview findings, particularly regarding the lack of government assistance and structural barriers. These challenges include difficulties in accessing financial assistance, land, farming equipment, and water. Participants indicated that there was inadequate government support and a lack of mentorship for emerging agricultural cooperatives. This is confirmed by the following participants:

*Acquisition of land and farming equipment and accessing financial assistance is one of the biggest challenges. Also, lack of support from public office bearers is another setback, we need those awareness intervention, support, education, and trainings in order to thrive. There is need to consider or review minimum membership number to maybe 3 so that we reduce the risk of free riders (Focus Group 1, 2 and 3).*

The focus group discussions confirmed these findings, emphasising the structural challenges of accessing land, financial assistance, and modern farming equipment. Participants highlighted the need for greater government intervention to provide mentorship and support for emerging cooperatives, a recommendation that aligns with Ma et al. (2021), who argue that supportive institutions, policies, and laws are critical for fostering cooperative growth. The disconnection

between policy promises and actual support for cooperatives, as noted by participants, underscores the need for more targeted and effective government involvement in agricultural development. This finding also contrasts with the DTI (2015) report, which claimed that the South African government is committed to promoting cooperatives as a solution to poverty and unemployment.

#### **5.4.4.3 Economic and Social Benefits**

This sub-theme explored the economic and social benefits of agricultural cooperatives to the community. Participants strongly believed in the substantial influence of agricultural cooperative ventures in reducing poverty, hunger, and malnutrition, thereby promoting good health. They emphasised that these cooperatives play a vital role in ensuring a steady food supply, offering fresh and nutritious produce to their communities. This is confirmed by the following participant:

*I think it will minimise poverty, hunger, and malnutrition, hence promoting good health. I always have enough food at my home, vegetables, chickens and maize because of this cooperative. Remember our work is to produce food, that is our work nothing else. So, I am assured that I will never suffer from malnutrition and I also eat quality fresh food (Interviewee 1, 2023).*

This outcome aligns with Papilaya et al. (2021), who found that rural cooperatives are key players in food supply chains, contributing to the accessibility of fresh produce in local markets. Similarly, Serra and Davidson (2021) argue that cooperatives help improve food security by enabling smallholder farmers to overcome the challenges of production and distribution. Candemir et al. (2021) also noted that in countries like Austria and Denmark, agricultural cooperatives hold a significant share in the market, providing stability and resilience to rural economies. Buendía-Martínez et al. (2020) add that cooperatives foster food self-sufficiency in rural areas, thus promoting better health outcomes through improved nutrition.

Furthermore, the majority of participants emphasised that agricultural cooperatives have played a significant role in creating employment and providing valuable economic opportunities for them. Participants strongly believed that they are fully utilising their capacity and leveraging the cooperative model to maximise their economic potential. This is confirmed by the following participant, who conveyed the same position, supported by the following comment:

*Also, you do not easily get old because you keep on engaging in training and physical activities. Can you imagine that I am 65 years old and still attending*

*to my cooperative duties? Every time of the year, we have something to do. If I am not in the field, I am at the market or at the meeting discussing cooperative business. So, in cooperatives, we do not retire early. I think, to me, this is one of the benefits, and I am managing to put food on the table. I am working with my children, who have just finished their high school education. People who are most benefiting are members, and the community can only benefit through getting employment, like in our area, where the women are benefiting through dressing chickens (Interviewee 12, 2023).*

This is supported by Zhang et al. (2021), who found that cooperatives are effective in addressing unemployment and underemployment, particularly in rural settings. ILO (2017) reported that cooperatives created over 16 million jobs across 15 African countries, demonstrating their capacity to provide sustained economic opportunities. Furthermore, Serra and Davidson (2021) highlight that through the cooperative model, even older individuals remain active in economic activities, contributing to their households and the economy. Bianchi and Vieta (2020) also note that cooperative members benefit from continuous engagement and training, allowing them to remain productive well into their later years.

Additionally, some participants expressed that the agricultural cooperatives play a crucial role in creating opportunities for market access, both locally and internationally. This is confirmed by the following participant who stated:

*The cooperatives are given opportunities to exhibit their products on international platforms for free, which assists them in reaching excess international markets if they are managing their business well. The government pays the logistical costs and everything else for the cooperatives to showcase their work. Participating in trade shows for the past five years has been extremely beneficial. As much as I can complain, the government is giving varsity markets in terms of cooperative products. Government is one of our huge markets as cooperatives (Interviewee 6, 2023).*

Market access, both locally and internationally, is another significant economic benefit highlighted by the participants. They emphasised the role of government in facilitating cooperatives' participation in international trade shows, enabling them to expand their market reach. Billiet et al. (2021) also

noted that producer cooperatives often assist their members with branding, processing, and marketing, thus enhancing their competitiveness. Candemir et al. (2021) found that cooperatives in Europe similarly benefit from government support in accessing international markets. This access not only increases the profitability of cooperatives but also strengthens their market presence. Buendía-Martínez et al. (2020) argue that cooperatives that actively engage in collective marketing strategies tend to have better outcomes in terms of market access and sales volumes.

However, a few participants expressed that the environment for agricultural cooperatives to thrive is not conducive, primarily due to a lack of coordination between the government and weak cooperative movement structures. They voiced concerns about the need for better collaboration and support from the government to strengthen the cooperative sector. Participants emphasised that without effective coordination and robust cooperative structures, the full potential of agricultural cooperatives cannot be realised. This opinion was echoed by the following participant:

*They are very few benefits we can talk about. This is because the government does not make the environment conducive for cooperatives as much as possible. However, in as much as government is letting us down, we are also responsible (Interviewee 4, 2023).*

This view is consistent with Karki (2021), who emphasised that successful cooperatives often rely on strong partnerships with government and private entities to secure the resources and support necessary for growth. Ma et al. (2021) also highlight the importance of institutional support, arguing that without clear policies and effective coordination, cooperatives struggle to realise their full potential. Francesconi and Wouterse (2021) similarly noted that the lack of consistent government backing often leads to the underperformance of cooperatives in Africa. Bianchi and Vieta (2020) further underscore the need for a cohesive strategy that aligns cooperative goals with government development agendas.

The focus group discussions complement these interview findings, reinforcing the economic and social impact of cooperatives. The majority of the participants felt that agricultural cooperatives serve as avenues for economic empowerment, provide business opportunities and facilitate team work among communities. This is confirmed by the following participants:

*As a cooperative, we are given opportunities to exhibit our products on international platforms for free, which assists us reaching international markets if we manage our*

*business well. The cooperatives improve my communication skills, give me more experience, and teach me how to take care of the environment, they have collective solutions, which include mobilising capital, sourcing of farming implements, inputs, and markets (Focus Group 1,2,3 and 4).*

This finding affirmed a discovery from the interviews, highlighting the significant role of agricultural cooperatives in facilitating collective solutions and enabling market access, both at the local and international levels. This result aligns with the conclusions drawn by Dipierri and Zikos (2020) who found that cooperatives foster social and cultural capital, which enhances economic opportunities for members by improving trust, collaboration, and resource mobilisation. Billiet et al. (2021) also stress that cooperatives offer platforms for collective decision-making and problem-solving, which are essential for overcoming economic challenges in rural areas. Zhang et al. (2021) add that cooperatives help marginalised groups, such as women and youth, to engage more actively in economic activities, thus promoting inclusivity and economic diversification.

Moreover, the focus groups further validated the interview findings regarding the cooperative model's broader societal benefits. Participants highlighted that cooperatives create indirect employment, improve communication and farming skills, and facilitate teamwork, contributing to social cohesion. These benefits extend to both members and non-members and include opportunities for collective solutions, improved communication and farming skills, access to markets, and employment generation. This is confirmed by the following participants:

*At least I can say I get benefited through received some sponsors to our project. We received support of water tanks for storage, watering cans, and farm implements and so on from the government. So, the government cannot sponsor one person to such extent, and these are the benefits of a registered cooperative. All I can say is, there is so much benefit because you learn a lot of things. When you go to that training, you get something that you can use easily... So, in cooperatives, collective efforts make us keep going (Focus Group 1 and 4).*

This finding confirmed the results from the interviews, where it was found that agricultural cooperatives play a vital role in ensuring a steady food supply, employment creation, and nutritious produce for the community at large. This aligns with the conclusions drawn by Buendía-Martínez et al. (2020) demonstrated that cooperatives contribute to local economies by creating indirect jobs,

improving communication skills, and fostering community collaboration. Serra and Davidson (2021) also pointed out that cooperatives often engage in community development initiatives, providing both economic and social benefits to members and non-members alike. Bianchi and Vieta (2020) argue that cooperatives, through their collective nature, strengthen social bonds and promote a sense of shared responsibility, which contributes to overall community well-being. Dipierri and Zikos (2020) emphasise that cooperatives' ability to foster teamwork and collaboration among community members enhances both their economic resilience and social harmony.

#### **5.4.4.4 Knowledge and Training**

The significance of education and training within agricultural cooperatives cannot be overstated, as it acts as a catalyst for the success and growth of its members. Engaging actively in cooperatives allows members to seize the invaluable opportunity to learn and develop essential skills. The acquisition of key competencies empowers participants to navigate challenges, seize opportunities, and achieve individual success within the cooperative community.

The overwhelming sentiment among participants was that their involvement in agricultural cooperatives enabled them to gain invaluable skills and knowledge. Participants viewed agricultural cooperatives as fertile ground for acquiring hands-on experience, sharing expertise, and gaining a comprehensive understanding of various facets of the agricultural industry. This is confirmed by the following participant:

*Cooperative is a science, and without wide knowledge of it, someone cannot benefit from it. This will assist you in realising the benefits ranging from training to information sharing in regards to accessing markets, other business partners, and so forth. We are now able to realise some form of linkages and organisations that facilitate the exports of your products, such as Durban Chambers, if you are here in Durban, South Africa. What our leaders do, they train us first, giving us every piece of information about what is happening in SARs, which South African Revenue Authority, and inviting organisations that has anything to do with cooperatives so that they can share ideas and knowledge to open the doors to international and regional markets (Interviewee 7, 2023).*

This aligns with the findings of Moon and Lee (2020), who argue that cooperatives foster international collaboration by promoting knowledge-sharing and expertise across borders. Kayongo et al. (2022) also emphasise that cooperatives are important vehicles for capacity building, helping members develop the competencies required to navigate agricultural challenges. Similarly, Fernandez-Guadaño et al. (2020) note that cooperatives enhance agricultural revenue by improving access to technical expertise and training, ensuring that members are equipped to succeed.

Moreover, participants deeply appreciated the cooperative's commitment to their success and improvement, as they receive targeted guidance, specialised training, and valuable technical assistance. This is confirmed by the following participant who conveyed the same opinion, as confirmed by the following comment:

*After successfully registering our cooperative, we approached the municipality seeking land for our project. We were granted approximately one hectare, which marked the beginning of our journey. The municipality also assigned an advisor to assist us with our projects, and they generously provided us with seeds (Interviewee 10, 2023).*

This finding is consistent with Fernandez-Guadaño et al. (2020), who argue that cooperatives benefit significantly from targeted guidance and technical support, which enhances productivity and market competitiveness. Atmadja et al. (2021) also emphasise that human capital, which includes skills and knowledge acquired through training, is essential for the success of livelihood strategies in rural communities. These findings highlight the critical role that external stakeholders play in providing the training necessary for cooperative growth.

However, some participants expressed concerns about the agricultural cooperative's overreliance on external stakeholders, such as government and non-governmental organisations. They strongly believe that the cooperative movement should establish its own training institutions. This sentiment is echoed by one of the participants, who stated:

*We need to have a technical type of cooperative first that will assist our farmers with the correct inputs under conducive conditions. This cooperative should produce the correct type of seed, which we need, the correct egg for chicks, which we need, and so on, according to the agricultural sector; unfortunately, we are yet to get there (Interviewee 15, 2023).*

This sentiment contradicts the findings of Schwettmann (2023), who suggest that cooperatives are governed by principles of self-reliance and sustainability, but that they still benefit from external technical assistance. Ma et al. (2021) also point out that cooperatives often require external support to overcome challenges related to skills and knowledge gaps. Nonetheless, these participants stressed the importance of building internal capacities to reduce dependency on external entities.

The findings from the focus group discussions reinforce these insights. Participants highlighted that agricultural cooperatives actively engage in various training programs organised by government agencies, leaders, and other stakeholders to enhance members' skills and knowledge in farming and cooperative management. The majority of the participants expressed that they regularly hold meetings to discuss relevant issues, set goals, and share updates on new developments, which helps keep members informed and motivated. This is confirmed by the following participants who conveyed the same opinion:

*We participate in trainings organised by our leaders and government, and we also encourage ourselves to be patient because whatever we do, we do it for ourselves. Meetings keep us aware of everything; it could be the weather, market changes, or what outside people think when they are looking at us... We always try to use persuasive means and not force with our members (Focus Group 2 and 4)*

This was a confirmation of one finding from the interviews, where it was discovered that agricultural cooperatives are fertile ground for acquiring hands-on experience, sharing expertise, and gaining a comprehensive understanding of various facets of the agricultural industry. This result was consistent with the findings of Li et al. (2020) in their study of livelihood assets, which concluded that skills, knowledge, job competence, and good health enable people to pursue various livelihood strategies and fulfill their livelihood goals. Similarly, Atmadja et al. (2021) define human capital as the knowledge that people bring to the solution of any issue.

#### **5.4.4.5 Current and Future Approaches on Cooperative Development**

Current and future approaches to more effective cooperative management can include engage influential stakeholders, establish cooperative institutions, address government promises and support, educate rural communities and recognising successful cooperatives. Participants felt that cooperatives stakeholder engagement needs to be improved for effective agricultural cooperatives

contribute towards sustainable rural livelihoods in South African communities. This is confirmed by the following participant:

*I think we need to sensitise the community about the cooperative model first. Number two we will need to support young people so that they become successful cooperative members, to be active in advocacy and lobby the government. We also need to cultivate a culture of hard working and love other people as cooperatives are assets for the entire community. In terms of our rural communities, I think we should go back to our roots and we bring our amakhosi (cultural leaders) on board, bring the law, the constitution on board, the politicians, the government, the private sector, youths on board so that we have an inclusive approach. We need to bring the SDG on board and also the ICA so that we have one program that addresses rural agricultural cooperatives. So, if you can bring all those elements together and forming one program, I tell you we would be in a position to improve the livelihood of our rural cooperative members (Interviewee 15, 2023).*

This finding aligns with Karki (2021), who suggest that collaboration with both public and private entities is crucial for the effective management and sustainability of cooperatives. They argue that cooperatives need to build strong relationships with development organisations, regulatory bodies, and local communities to enhance their impact. Raniga (2021) also highlights that African communities historically embraced collaboration as an integral part of cooperative structures, which fostered social cohesion and economic resilience. Furthermore, Wang et al. (2021) stress the need for inclusive policy frameworks that integrate local governance structures, such as chiefs and cultural leaders, to effectively address the challenges faced by cooperatives and improve livelihoods in rural areas.

The focus group discussions provided further support to these findings, illustrating the need to actively involve key stakeholders, such as chiefs and other community leaders, in sensitising the community about the cooperative model. The majority of participants believed that there is a need to sensitise and educate community members about the agricultural cooperative model, fostering partnerships with influential community figures as a way of improving rural livelihoods and sustainable development. This is confirmed by the following participants:

*I think we should go to the chiefs because they are very influential people in our rural community, bring our cultural leaders on board, bring the law, the constitution on board, the politicians, the government, the private sector, youths on board so that we have an inclusive approach. So, if people of South Africa can go for cooperative, there must be a helping hand... (Focus Group 2, 3 and 4).*

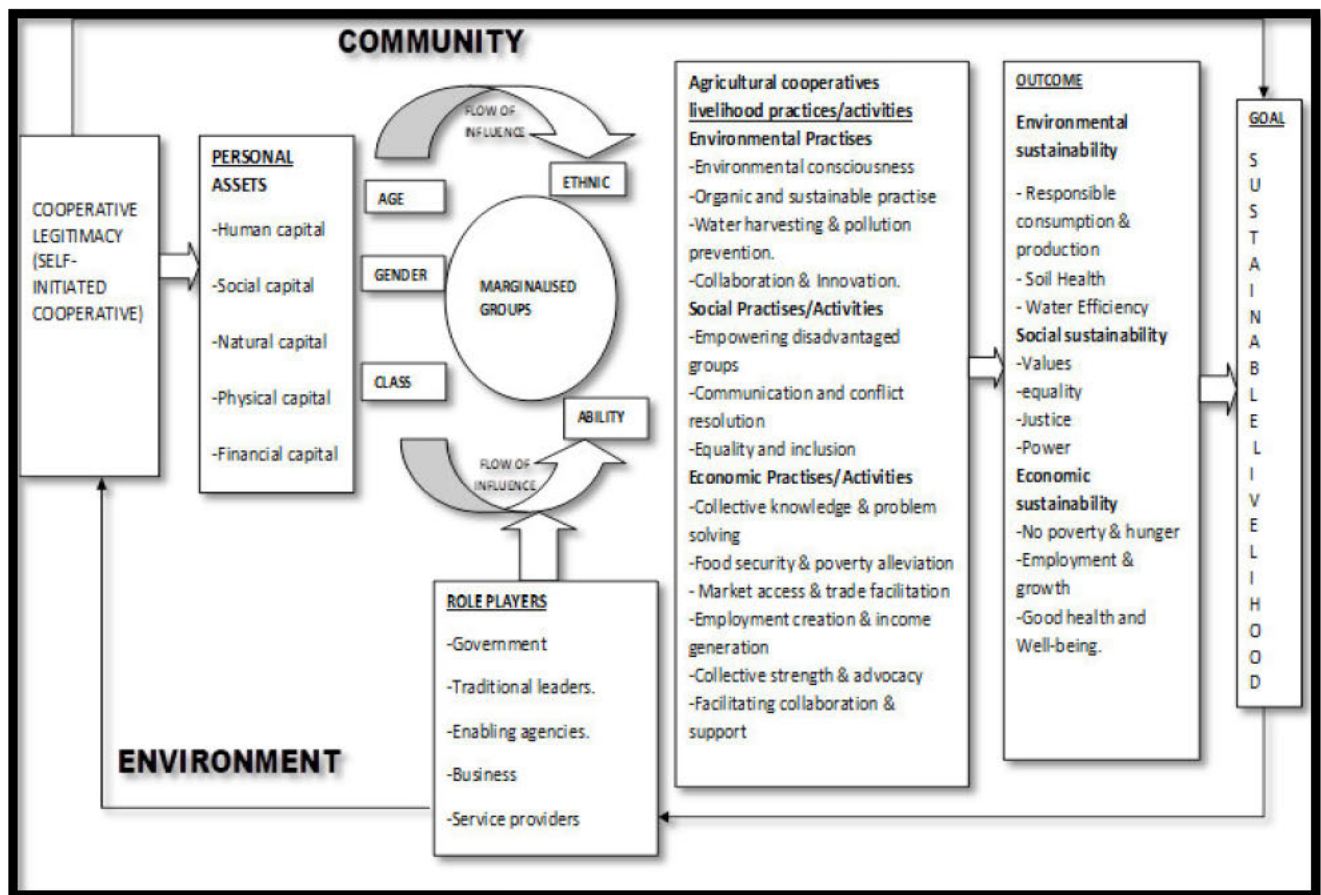
This insight mirrors the findings of Ma et al. (2021), who emphasise that stakeholder engagement is essential for the long-term success of cooperatives. Moreover, Wang et al. (2021) argue that involving local leaders in the management of cooperatives can strengthen governance and create a more supportive environment for cooperative members. Raniga (2021) similarly notes that fostering collaboration between cooperatives and local leadership can lead to more sustainable development outcomes. The focus groups also highlighted the importance of educating rural communities about the cooperative model, a sentiment echoed by Fernandez-Guadaño et al. (2020), who advocate for continuous education and awareness programs to ensure that cooperative members are well-informed and empowered.

### **5.5 The Proposed Model for Enhancing the Agricultural Cooperatives on the Sustainability of Rural Livelihoods.**

The fifth objective of this research was to offer recommendations aimed at improving the sustainability of rural livelihoods through agricultural cooperatives in KZN province, South Africa. To accomplish this objective and deepen the researcher's comprehension, an extensive literature review was conducted, supplemented by data collected through focused group discussions and in-depth interviews. The resulting findings, which were synthesised into a coherent narrative and presented earlier, drew upon both the initial theoretical groundwork and empirical research, thereby creating a robust foundation for the proposed model's development.

The conceptualisation of the proposed model was rooted in the insights gleaned from the literature review's theoretical research and guided by established best practices supported by influential sources (DFID, 1999; Hamilton-Peach & Townsley, 2004; Su et al., 2018; Adams, 2019; Woyesa & Kumar, 2021). This conceptual approach was then refined and tailored based on the research study's specific findings, which directly addressed the concerns and suggestions voiced by the participants. The process of merging these inputs culminated in the formulation of a comprehensive model designed to enhance the sustainability of rural livelihoods through agricultural cooperatives. The formalised conceptual framework depicting this model is visually represented in Figure 6.7, offering a tangible

representation of the proposed strategies and mechanisms for cooperative advancement within the context of rural livelihood sustainability.



**Figure 5.8. Proposed model for enhancing the agricultural cooperatives on the sustainability of rural livelihoods (Source: own compilation, 2024)**

A practical yet comprehensive methodology designed to improve cooperative management and production within rural communities is presented in the framework for sustainable rural livelihood through agricultural cooperatives. This framework outlines the crucial supporting elements, traits, and decisive acts that guide the trajectory towards community-centric sustainable livelihoods and is illustrated in the proposed model (Figure 6.7). Each supporting factor, quality, and action within this holistic framework is outlined below, along with the appropriate implementation tools, to provide for a complete understanding of every aspect.

The approach acknowledges the operational context in which cooperative firms operate as having a significant influence. The framework's outer loop represents the fusion of crucial elements that act

as catalysts for better project performance. Each of these factors contributes to the main framework by nurturing cooperative management. Each factor's role is expounded upon in the subsequent sections.

### **5.5.1 Environment**

The term "environment" refers to the whole ecosystem that is shaped by several players, including governmental organisations, traditional leaders, enabling agencies, businesses, and service providers. The governmental frameworks, regulatory frameworks, financial assistance, and cooperative initiatives that combined promote the expansion and viability of agricultural cooperatives within rural areas define this environment. It includes all of the environmental elements, physical, social, economic, and cultural—that contribute to the development of cooperative activity. In this setting, cooperative members have access to resources, information, and markets while also being encouraged to innovate and get involved in their communities. Through the creation of a supportive environment, stakeholders enable agricultural cooperatives to flourish as agents of good change, advancing rural development, boosting livelihoods, and enhancing community well-being.

### **5.5.2 Community**

The community has a significant impact on how agricultural cooperatives affect the viability of rural livelihoods. These cooperatives generate a sense of shared purpose and communal responsibility while acting as catalysts for community empowerment and cohesiveness. Cooperatives foster a collaborative atmosphere where information, resources, and experiences are shared by bringing farmers, stakeholders, and locals together. This sense of community helps to strengthen social ties and encourages the sharing of creative ideas, empowering people to work together to address problems like resource scarcity, market volatility, and climate change.

Additionally, the cooperative model promotes inclusive participation, guaranteeing that every member of the community, especially members of marginalised groups, has a voice and a role in the decision-making processes. This inclusiveness not only encourages social fairness but also adds to the community's general wellbeing. Agricultural cooperatives improve the lives of people in the community by tackling concerns like food security, poverty reduction, and gender equality. This results in a positive cycle of sustainable development. Furthermore, community involvement encourages a stronger connection to regional landscapes, supporting ethical land management practices and environmental conservation initiatives. Ultimately, agricultural cooperatives are powerful change agents for rural sustainability because of the sense of community they build.

### **5.5.3 Cooperative Legitimacy**

The term "cooperative legitimacy" describes how a cooperative institution is viewed in its working environment in terms of credibility, acceptance, and authority. This establishes trust and confidence among the cooperative's members, stakeholders, and the larger community by signifying the cooperative's congruence with societal norms, values, and expectations. Due to their grassroots origins, self-initiated cooperatives, which naturally arise from the goals and needs of the community, frequently enjoy increased credibility. These cooperatives are more sensitive to local dynamics and are motivated by a sincere desire to take advantage of particular opportunities or obstacles. They are therefore more likely to have backing, active support, and engagement from members and stakeholders, increasing the likelihood that they will succeed in attaining their goals. Self-initiated cooperatives tend to authentically reflect the interests of their members, generating a sense of ownership and collective responsibility that further solidifies their legitimacy and sustains their positive influence on rural livelihoods.

### **5.5.4 Personal Assets**

Personal assets are the many resources and skills that people and communities have, which help them be able to create and maintain a living. Human capital, social capital, natural capital, physical capital, and financial capital are the five types of assets that support a living (Li et al., 2020). Together, these resources interact and contribute to the resilience, success, and sustainable growth of cooperative enterprises and the communities they serve.

#### **i). Human capital**

A person's knowledge, skills, health, education, and ability to work are all included in their human capital. Human capital is essential for efficient cooperative management, agricultural productivity, and community development in the context of agricultural cooperatives and rural livelihoods. The cooperative principles outlined by Act No. 14 of 2005 (as amended by Act No. 6 of 2013) place a strong emphasis on member skill development, education, and training. To improve their members' knowledge of sustainable farming methods, management abilities, and agricultural expertise, cooperatives frequently offer training programs, workshops, and capacity-building projects. Aside from increasing agricultural output, this investment in human capital also gives cooperative members the tools they need to participate effectively in decision-making processes and advance their local communities as a whole.

## **ii). Social capital**

The networks, connections, and social ties that people and communities have are referred to as social capital. Social capital is essential for developing cooperation, information exchange, and member support in agricultural cooperatives. Cooperatives build forums for dialogue, socialisation, and group problem-solving, so enhancing the social cohesion of rural communities. Actively participating in cooperative activities promotes members' trust, collaboration, and sense of purpose, empowering them to pool resources, exchange knowledge, and work together to address issues like market access and resource management.

## **iii). Natural capital**

Natural resources including land, water, forests, and biodiversity are all included in a region's natural capital. Natural resources are essential to the operations and livelihoods of agricultural cooperatives. For agricultural cooperatives and the communities they serve to remain viable over the long run, sustainable natural resource management is essential. To guarantee that resources are available for both the present and future generations, cooperatives should frequently advocate for environmentally sustainable farming methods, conservation initiatives, and prudent land usage (Li et al., 2020).

## **iv). Physical capital**

Infrastructure, implements, machinery, and other material possessions that support productive endeavors are all examples of physical capital. Physical capital is important for agricultural cooperatives because it increases efficiency and output. Cooperatives may make investments in infrastructure for shared equipment, storage spaces, transportation, and processing. Members can overcome their own resource limitations and collaboratively optimise their marketing and manufacturing efforts through cooperative.

## **v). Financial capital**

The monetary resources that people and communities have access to are referred to as financial capital. For the purpose of purchasing agricultural inputs, building infrastructure, launching marketing campaigns, and engaging in other cooperative activities, agricultural cooperatives need money. The Act No. 14 of 2005 and its later amendments offer a legal foundation for cooperative financial management and sustainability. Through donations, shares, and savings, cooperative members pool their financial resources to make sure the cooperative is financially viable and has access to funding for its day-to-day operations and development projects.

### **5.5.5 Marginalised Groups**

Agricultural cooperatives should offer a special chance to promote inclusive development by putting marginalised populations at the center of their operations. These groups, which might include those who are categorised by gender, ethnicity, age, class, and ability, frequently experience structural disadvantages that restrict their access to resources, opportunities, and decision-making processes. Agricultural cooperatives can influence positive change in their communities by consciously prioritising the inclusion and empowerment of these marginalised members.

Cooperatives must acknowledge the significance of variety and actively promote gender equality, social equity, and inclusivity in order to provide marginalised groups with sustainable means of subsistence (UN, 2017). Cooperatives can take use of the distinctive perspectives, abilities, and contributions of women, young people, persons with disabilities, and other marginalised groups by involving them as active participants and decision-makers. This may result in more creative approaches, higher agricultural productivity, and better resource management. The cooperative model can also offer a nurturing atmosphere that aids marginalised members in overcoming entry hurdles, gaining access to training, developing their skills, and improving their capacity to participate in cooperative activities (Rena, 2021).

Within agricultural cooperatives, support for marginalised populations should take many forms. Access to inputs, resources, and technologies may be made possible via financial support. The information and abilities required to take an active part in cooperative activities can be provided to marginalised members through training and capacity-building efforts. Furthermore, democratic decision-making and democratic participation principles ensure that marginalised perspectives are heard and appreciated. Advocacy efforts can raise awareness about the specific challenges faced by these groups and facilitate the creation of policies that promote their inclusion and well-being.

Assets for generating a living are essential for marginalised communities to achieve sustainable livelihoods. Individuals are given the ability to contribute effectively and fairly through the development of human capital through education and training. Social capital networks let members who are marginalised connect with one another, share experiences, and develop group solutions. Conservation of natural capital benefits marginalised populations by ensuring that they have access to resources for their livelihoods. Infrastructure and equipment physical capital improvements can close resource bottlenecks and boost production. Last but not least, access to credit and financial capital support can help marginalised members invest in their agricultural businesses and increase

their economic chances. By addressing the specific needs of marginalised groups through inclusive practices and targeted support, agricultural cooperatives can contribute to their social, economic, and overall well-being, thereby promoting sustainable livelihoods and community development.

#### **5.5.6 Agricultural Cooperatives Livelihood Practices/Activities**

Due to their diversity, agricultural cooperatives have the ability to improve rural livelihoods and promote overall development by encouraging cooperation among their members. These cooperatives can be divided into two groups: production cooperatives, where farmers work together to grow common agricultural land, and service cooperatives, where members receive a range of services while doing independent agricultural activities. These many cooperative structures, which share the objective of improving members' well-being, can work in concert with agricultural livelihood initiatives to provide a more thorough and effective strategy for rural development. Agricultural cooperatives offer diverse livelihood practices that enhance rural development by promoting cooperation among members. These practices, encompassing environmental, social, and economic activities, improve sustainability and well-being.

##### **5.5.6.1 Environmental Practises/Activities**

Agricultural cooperatives adopt environmentally conscious practices, such as organic farming, water conservation, and pollution prevention, to promote sustainable rural livelihoods. By encouraging responsible land management and collaboration on innovative eco-friendly solutions, these cooperatives help maintain soil health and biodiversity. This environmental stewardship ensures long-term agricultural productivity, safeguarding both the land and the livelihoods of rural communities.

##### **i). Environmental consciousness**

Agricultural cooperatives' emphasis on environmental consciousness promotes sustainable rural livelihoods by fostering eco-friendly farming methods that protect natural resources. Through organic farming, water conservation, and discouraging harmful activities like veld fires and over-exploitation of wetlands, cooperatives enhance land productivity while preserving biodiversity. These practices reduce the negative environmental impacts of farming, ensuring the land remains fertile and viable for future use. The cooperatives' promotion of responsible land management and the use of natural water sources further sustain agricultural productivity, helping rural communities achieve long-term food security while maintaining the health of their ecosystems.

## **ii). Organic and sustainable practices**

Cooperatives play a critical role in promoting organic and sustainable farming, directly benefiting rural livelihoods. By prioritising the use of organic manure, compost, and natural inputs, cooperatives reduce dependence on chemical fertilizers and pesticides, thus preserving soil health and reducing environmental degradation. These sustainable practices not only improve the quality of agricultural produce but also ensure long-term viability of the land for farming. As rural communities rely heavily on agriculture, adopting organic practices strengthens food security, reduces costs associated with chemical inputs, and enhances both the economic and environmental well-being of cooperative members.

## **iii). Water harvesting and pollution prevention**

The practice of water harvesting and pollution prevention in agricultural cooperatives directly impacts the sustainability of rural livelihoods by ensuring the availability of water for irrigation and protecting water resources from contamination. Harvesting rainwater and preserving borehole water helps communities cope with unpredictable rainfall, which is increasingly critical in areas prone to droughts. Additionally, preventing pollution from agricultural chemicals protects the quality of water sources, which are vital for both farming and human consumption. These practices not only enhance food production during dry seasons but also safeguard environmental health, ensuring long-term access to clean water.

## **iv). Collaboration and innovation**

Collaboration and innovation fostered by agricultural cooperatives play a critical role in advancing sustainable rural livelihoods. By working together on water conservation and land use practices, cooperatives create opportunities for shared learning, resource pooling, and the development of creative solutions to local challenges. Innovative approaches, such as competitions to develop water-saving technologies, enhance agricultural efficiency and environmental protection. This collaborative spirit not only improves productivity but also strengthens social capital within rural communities, promoting collective action for the common good. Ultimately, these efforts contribute to more resilient farming systems and sustainable livelihoods in rural areas.

### **5.5.6.2 Social Practises/Activities**

Social practices in agricultural cooperatives focus on inclusivity, empowering marginalised groups like women and people with disabilities, and fostering effective communication. These practices

promote equality, conflict resolution, and social cohesion, creating stronger community bonds. Such social frameworks contribute to sustainable livelihoods by enhancing collective resilience and participation in cooperative governance.

### **i). Empowering disadvantaged groups**

Agricultural cooperatives have a profound impact on sustainable rural livelihoods by empowering disadvantaged groups, such as women, youth, widows, and people with disabilities. By providing these marginalised individuals with opportunities to engage in agriculture, cooperatives foster financial independence and community resilience. Cooperatives create platforms for skills development and offer practical experiences, as seen in their partnerships with other stakeholders such as educational institutions, NGOs and development agencies. This inclusivity addresses historical inequalities, promoting self-sufficiency in rural areas (Christian et al., 2024). Empowering vulnerable groups also strengthens the social fabric, contributing to more equitable rural economies and uplifting entire communities.

### **ii). Communication and Conflict Resolution**

Effective communication and conflict resolution are crucial for the sustainability of agricultural cooperatives and the rural communities they serve. Open communication channels and regular meetings promote transparency and trust, ensuring that all members have a voice in decision-making processes (Pansera & Rizzi, 2020). This inclusive approach fosters collective problem-solving and conflict resolution, essential for maintaining a harmonious cooperative environment. By mitigating conflicts through clear communication, cooperatives help create a stable and supportive environment that contributes to the overall well-being of rural livelihoods, ensuring that cooperative activities continue without disruption.

### **iii). Equality and inclusion**

The promotion of equality and inclusion within agricultural cooperatives significantly influences sustainable rural livelihoods. By ensuring equal opportunities for men, women, and individuals with disabilities, cooperatives create an environment that values diverse contributions to collective progress. The cooperative governance principle of "one member, one vote" ensures equitable participation in decision-making, fostering a sense of ownership and accountability among members (Papilaya et al., 2021). This egalitarian approach empowers community members, promotes social

justice, and contributes to the development of more resilient rural communities by ensuring that all stakeholders benefit from cooperative activities.

### **5.5.6.3 Economic Practises/Activities**

Agricultural cooperatives improve economic sustainability through collective problem-solving, market access, employment creation, and food security initiatives. By pooling resources and negotiating better trade terms, cooperatives boost income generation and alleviate poverty. This strengthens the economic foundations of rural communities, ensuring resilience and long-term sustainability of their livelihoods.

#### **i). Collective knowledge and problem-solving**

Agricultural cooperatives foster collective knowledge and problem-solving, empowering rural communities to improve their livelihoods. By pooling resources and collaborating on training, cooperative members can access crucial skills in planning, marketing, and farm management, which would be difficult to attain individually. This collaboration boosts productivity, helps mitigate common farming challenges, and enhances decision-making through shared learning. As Kalogiannidis (2020) suggests, cooperatives leverage social capital for collective action, unlocking opportunities for members. The sharing of knowledge and expertise strengthens the community's resilience, enabling it to respond to economic and environmental shocks more effectively.

#### **ii). Market access and trade facilitation**

Agricultural cooperatives facilitate market access and trade opportunities, significantly impacting rural livelihoods by allowing members to sell produce collectively. This improves their bargaining power, enabling them to negotiate better terms with suppliers and buyers, including larger markets and institutions such as hospitals and supermarkets. Cooperatives enhance market power by pooling resources and leveraging economies of scale. Furthermore, rural cooperatives, by supplying local markets and expanding into urban areas, contribute to economic sustainability, improve food security, and foster trust within the community, reinforcing local development initiatives (Ciruela-Lorenzo et al., 2020).

#### **iii). Employment creation and income generation**

Agricultural cooperatives play a vital role in employment creation and income generation in rural areas. By offering both voluntary and paid positions, they provide essential job opportunities for community members. Cooperatives enable members to earn not only monetary compensation but

also non-monetary benefits such as farm produce, diversifying income streams. According to Buendía-Martínez et al. (2020), cooperatives significantly contribute to job creation, enhancing economic sustainability. Despite income variability and reinvestment challenges, cooperatives promote community resilience, as evidenced by Rapando et al. (2021), who found that cooperatives in Kenya support livelihoods, reduce poverty, and foster local economic growth.

#### **iv). Food security and poverty alleviation**

Agricultural cooperatives play a crucial role in enhancing food security and alleviating poverty within rural communities. By fostering professional farming practices and ensuring a reliable food supply, cooperatives empower members to provide nutritious food for their families. These cooperatives allow members to share resources and produce affordable, healthy food, thus contributing to better health outcomes. As noted by participants, collective efforts reduce malnutrition, improve food access, and help combat hunger. This aligns with research from Zhang et al. (2021), which underscores the importance of cooperatives in reducing poverty and ensuring food security.

#### **v). Collective Strength and Advocacy**

Cooperatives enable members to amplify their collective voice, influencing markets, government policies, and access to resources. Through cooperative advocacy, members can negotiate better terms with buyers and lobby the government for favorable environments. Participants emphasised the power of collective action, enabling small farmers to overcome individual limitations. This collective strength empowers cooperatives to access larger markets and negotiate more favorable prices, ultimately benefiting rural livelihoods. Schwettman (2023) affirms that cooperatives enhance market access and cost efficiencies, ensuring long-term economic sustainability for rural communities.

#### **vi). Facilitating collaboration and support**

Cooperatives promote collaboration and mutual support through regular meetings, exchange visits, and training. These activities build social capital, helping members share knowledge and solve challenges collectively. The cooperative principle of "cooperation among cooperatives" fosters solidarity, further enhancing individual and community success. This mutual support strengthens rural livelihoods by building trust, facilitating market access, and improving governance. As Serra and Davidson (2021) note, cooperative collaboration at various levels reinforces members' economic and social capabilities, directly contributing to the sustainability of rural communities.

### **5.5.7 Outcome**

Livelihood outcomes are the tangible and intangible benefits that people or communities obtain from the different practice or activities they take to enhance their quality of life and general well-being. These results cover a wide range of areas, including economic success, social equality, environmental sustainability, and individual empowerment, demonstrating the comprehensive effect of livelihood strategies on people's livelihoods and the general community resilience.

#### **5.5.7.1 Environmental Sustainability**

##### **i). Responsible consumption and production**

Agricultural cooperatives promote responsible consumption and production by encouraging sustainable farming practices such as organic farming, crop rotation, and composting. By reducing the reliance on chemical fertilizers and pesticides, cooperatives help protect ecosystems while improving soil health and long-term productivity. These practices ensure that natural resources are used efficiently, minimising waste and pollution. Cooperatives also foster local production systems, supporting rural economies by supplying fresh, eco-friendly produce to local markets, which reduces the environmental footprint associated with food transportation.

##### **ii). Soil health**

The emphasis on soil health within agricultural cooperatives is key to environmental sustainability. Practices such as crop rotation, use of organic manure, and conservation tillage protect the soil from degradation and erosion. These methods enhance soil fertility, promote the growth of beneficial microorganisms, and maintain nutrient cycles. By preventing overexploitation and ensuring that soils remain productive for future generations, cooperatives safeguard the land, which is vital for sustainable agriculture and long-term food security.

##### **iii). Water efficiency**

Water efficiency is a critical outcome of the environmental activities of agricultural cooperatives. Through initiatives such as water harvesting, drip irrigation, and efficient use of natural water sources, cooperatives help mitigate water scarcity, particularly in drought-prone areas. These practices ensure that water resources are used wisely, reducing waste and improving the resilience of farming systems to changing climate patterns. By protecting water quality and conserving resources, cooperatives contribute to sustainable agricultural production and protect rural communities from the adverse effects of water shortages.

### **5.5.7.2 Social Sustainability**

#### **i). Values**

Agricultural cooperatives emphasise core values such as solidarity, cooperation, and mutual support, which are crucial for sustainable social development. By fostering a sense of community, cooperatives strengthen social ties and ensure that all members have a voice in decision-making processes. These values contribute to social cohesion, enhancing the collective well-being of rural communities and ensuring that cooperative activities benefit all members equally.

#### **ii). Equality**

Promoting equality is central to the social sustainability goals of agricultural cooperatives. Through equitable access to resources, training, and decision-making opportunities, cooperatives ensure that marginalised groups, including women, youth, and people with disabilities, participate fully. The "one member, one vote" principle exemplifies how cooperatives promote inclusion and ensure that all members have an equal say, thus addressing social inequalities and creating more resilient rural communities.

#### **iii). Justice**

Agricultural cooperatives play a significant role in promoting social justice by ensuring fair treatment and equal opportunities for all members. By empowering disadvantaged groups and providing platforms for conflict resolution, cooperatives address historical inequities and foster a culture of fairness and respect (Ojobo & Damian, 2021). This focus on justice ensures that all cooperative members can contribute to and benefit from agricultural activities, improving overall community well-being and supporting long-term rural development.

#### **iv). Power**

The cooperative model decentralises power by ensuring that decision-making is shared equally among members. This empowerment is critical for creating inclusive and democratic governance structures within cooperatives. By distributing power evenly, cooperatives promote transparency, accountability, and trust, helping rural communities take collective control of their economic and social futures, leading to sustainable livelihoods.

### **5.5.7.3 Economic Sustainability**

#### **i). No poverty and hunger**

Agricultural cooperatives play a vital role in reducing poverty and hunger by promoting sustainable farming practices that enhance food security. Through the promotion of diversified agricultural practices, agricultural cooperatives can improve food security with the assistance of the government, traditional leaders, and non-profit organisations. In order to produce a variety of crops and food items and lessen reliance on a single food supply, cooperatives can work with nearby farmers. By working together, the risk of food shortages is reduced and a continuous supply of wholesome food is provided for both members and the larger community. By pooling resources, members of cooperatives can access better markets, improve productivity, and ensure a reliable food supply for their communities. These collective efforts reduce malnutrition and alleviate poverty, creating more resilient and self-sufficient rural economies.

#### **ii). Employment and economic growth**

Cooperatives significantly contribute to job creation and economic growth in rural areas. By offering employment opportunities and facilitating income generation through collective farming and market access, cooperatives help reduce unemployment and improve livelihoods. With assistance from the state and private sector, agricultural cooperatives help create jobs in rural areas. Additionally, cooperatives enable members to diversify income sources, offering stability in regions where traditional employment opportunities are scarce. Cooperatives need more labour for farming, processing, packaging, and marketing as they grow their operations and reach new markets. This rise in labour demand generates employment opportunities for cooperative members as well as other community members, lowering unemployment rates and fostering regional economic growth. This collective economic strength fosters sustainable rural development and poverty alleviation.

#### **iii) Good health and well-being**

The promotion of organic and sustainable farming practices within cooperatives contributes to the good health and well-being of both farmers and consumers. By reducing the use of harmful chemicals and producing healthier, more nutritious food, cooperatives help improve community health outcomes. Moreover, the economic stability provided by cooperative membership contributes to overall well-being by ensuring access to food, healthcare, and other essential services, thus supporting the broader sustainability of rural communities.

### **5.5.8 Role Players**

The role players, including government bodies, traditional leaders, enabling agencies, businesses, and service providers, are key stakeholders in the ecosystem that supports agricultural cooperatives in rural communities. Government entities shape the regulatory framework and provide financial backing for cooperatives. Traditional leaders lend social legitimacy and cultural integration, fostering community acceptance. Enabling agencies offer technical expertise and resources to enhance cooperative operations. Businesses extend market access and value chain integration, while service providers furnish financial and technological support. Together, these role players collaboratively facilitate an environment where agricultural cooperatives can thrive, driving sustainable rural development and improved livelihoods.

#### **i). Government**

Through the development of policies, the establishment of legal frameworks, and financial assistance, governments play a critical role in fostering an environment that supports agricultural cooperatives. Governments might, for instance, offer cooperatives advantages like tax breaks or subsidies, allot funding for programs that enhance their capacity, and enact regulations that are cooperative-friendly and make it easier for them to start up and run their businesses.

#### **ii). Traditional leaders**

Traditional leaders might help by endorsing agricultural cooperatives in their communities and by offering social support. Their impact can encourage community members to cooperate and trust one another, creating a favorable environment for cooperative activity. They can also encourage the incorporation of cooperatives into regional cultural norms and provide advice on how to resolve disputes.

#### **iii). Enabling agencies**

NGOs and development agencies, as well as other organisations with a focus on rural development, are crucial in helping agricultural cooperatives with technical support, education, and resources. They can support the cooperatives' efficacy and viability by providing access to modern farming methods, skill development, and market connections.

#### **iv). Businesses**

Through joint ventures, value chain integration, and market access, businesses can work with agricultural cooperatives. For instance, a cooperative that grows organic veggies might collaborate with a nearby supermarket to provide a steady market for its goods. This would be advantageous for both organisations and would help the cooperative's economy flourish.

#### **v). Service providers**

Service providers, such as financial institutions and technology providers, can facilitate the growth of agricultural cooperatives by offering tailored financial products, access to credit, and modern agricultural technologies. For instance, a cooperative seeking to invest in advanced irrigation systems could receive funding from a financial institution, leading to improved productivity and resilience.

When different stakeholders assist agricultural cooperatives, they can produce a range of important results that go beyond financial gains. Improved food security, reduced poverty, gender equity, women's empowerment, more job opportunities, cultural sustainability, and favorable ecological effects are some of these results. To realise these multidimensional benefits for cooperative members and the larger society, governments, traditional leaders, corporations, and non-profit organisations must work together. By collectively fulfilling their respective roles, these stakeholders contribute to the establishment, growth, and sustainability of agricultural cooperatives in rural communities. Their support creates an ecosystem that empowers cooperatives to overcome challenges, enhance livelihoods, and promote overall community development.

### **5.6 Chapter Summary**

This chapter presents the findings from both semi-structured interviews and focus group discussions, investigating the influence of agricultural cooperatives on the sustainability of rural livelihoods in KwaZulu-Natal. The interviews provided key insights into how cooperatives promote sustainable rural livelihoods, significantly enhancing the researcher's understanding. The focus group discussions supported and expanded on these findings by assessing the cooperatives' influence on environmental, social, and economic dimensions of sustainability. Both data sources helped identify strategies to improve the development of rural agricultural cooperatives and their contributions to sustainability. The focus group findings reinforced the interview results, offering a comprehensive view of cooperatives' impact. The next chapter will outline the conclusion and recommendations of the study.

## **CHAPTER SIX: CONCLUSION AND RECOMMENDATIONS**

### **6.1 Introduction**

The previous chapter provided a report on the findings from both the interviews and focus group discussions. This chapter draws conclusions and makes recommendations based on the reviewed literature and study findings, which need to be explored to ensure that optimal strategies for agricultural cooperatives are in place to contribute effectively to sustainable livelihoods in South African rural contexts. The chapter begins by summarising the literature reviews from chapters two and three. It will then provides the summaries from the empirical findings, guided by the study objectives. The study aimed to explore the influence of agricultural cooperatives on the sustainability of rural livelihoods in KZN, South Africa.

The objectives of the study were:

- i) To establish the influence of agricultural cooperatives on rural livelihoods in respect of environmental sustainability.
- ii) To establish the influence of agricultural cooperatives on rural livelihoods in regards to social sustainability.
- iii) To establish the influence of agricultural cooperatives on rural livelihoods in respect of economic sustainability.
- iv) To identify the challenges faced by agricultural cooperatives in KZN, South Africa, and assess their influence on the sustainability of rural livelihoods.
- v) To provide recommendations for enhancing the agricultural cooperatives on the sustainability of rural livelihoods in KZN.

### **6.2 Summary Based on each Literature Chapter**

The literature reviewed for this study focused on the development of cooperatives and the South African legal framework, a general overview of sustainable livelihoods, the sustainable livelihood framework, and the SDGs. By examining the development and legal frameworks of cooperatives, their role in fostering sustainable agriculture, and the qualitative insights from members of these cooperatives, this study provides a comprehensive understanding of the impact cooperatives have on rural communities in KZN.

## **6.2.1 Chapter 2: The Development of Cooperatives and their Legal Framework**

The historical development of cooperatives in South Africa is shaped by its legal frameworks, which have influenced how cooperatives operate and whom they serve. Initially, cooperatives were formalised through laws like the Cooperative Societies Act of 1908 and the Cooperative Society Act of 1922. These early regulatory frameworks primarily benefited white commercial farmers, particularly during the apartheid regime. Agricultural cooperatives provided these farmers with a means to improve their businesses, but they excluded the majority of black Africans, thus contributing to the systemic inequality in agricultural resources. Despite their exclusion from formal cooperatives, black communities developed informal cooperative systems such as "stockvels," which are grassroots savings and credit associations. These informal cooperatives provided economic resilience and empowerment for marginalised communities, demonstrating the importance of cooperatives in fostering solidarity and economic sustainability even without formal legal recognition.

### **6.2.1.1 Post-apartheid Legal Reforms**

The Cooperatives Act of 2005 marked a significant turning point in South Africa's cooperative landscape. It introduced a more inclusive cooperative model aimed at democratising access to economic resources, particularly for disadvantaged groups. The law promoted a three-tier system (primary, secondary, and tertiary cooperatives) to encourage local governance, alleviate poverty, and promote rural development. These legal reforms allowed previously marginalised groups, such as black farmers, women, and youth, to participate in cooperatives, though many of these cooperatives still faced structural challenges like governance issues and resource limitations. The Cooperative Amendment Act of 2013 sought to address some of these challenges by improving governance mechanisms and enhancing regulatory oversight. This led to a surge in the registration of cooperatives, particularly among rural women and youth. However, these cooperatives remain vulnerable due to poor management, inadequate resources, and a lack of ongoing support.

### **6.2.1.2 Challenges facing Agricultural Cooperatives**

The challenges hindering the success of agricultural cooperatives include poor governance, limited access to resources, and lack of education and training for cooperative members. Issues like mismanagement, lack of decision-making expertise, and the misuse of power by cooperative leadership are common. These obstacles prevent cooperatives from achieving their full potential in fostering rural development and sustainability. To overcome these challenges, a stronger legal

framework is needed, alongside sustained government support, leadership development, and member education.

### **6.2.2 Chapter 3: Conceptualisation and Theoretical Framework on Sustainable Agriculture**

Agricultural cooperatives play a vital role in sustainable agriculture, which involves producing food, fiber, and other resources in a way that maintains environmental, social, and economic viability. Sustainable agriculture ensures that farming practices do not deplete resources for future generations while also fostering community development. This approach aligns with global sustainability goals, such as the UN SDGs. The SLA provides a theoretical framework for evaluating how cooperatives contribute to rural livelihoods. SLA emphasises that multiple forms of capital—natural, human, social, financial, and physical—are needed to sustain rural livelihoods. For agricultural communities in KwaZulu-Natal, cooperatives are critical in pooling these forms of capital, facilitating access to markets, financial resources, and sustainable agricultural practices.

#### **6.2.2.1 The role of Cooperatives in Sustainable Agriculture**

Agricultural cooperatives enable small-scale farmers to adopt modern farming techniques, collaborate on resource management, and improve access to markets. By pooling resources and sharing knowledge, cooperatives offer members collective bargaining power and support the implementation of sustainable farming practices. This includes the use of organic farming techniques, conservation farming, and other eco-friendly practices that help preserve soil health, reduce water waste, and mitigate the negative effects of climate change. Despite their potential, cooperatives face obstacles such as low innovation, limited modernisation, and demographic challenges. For example, aging cooperative members and low literacy levels hinder the ability of some cooperatives to fully embrace sustainable agriculture. There is also a need for targeted education programs, leadership development, and increased government support to help cooperatives modernise and adopt more effective farming technologies.

#### **6.2.2.2 Cooperatives and the SDGs**

Cooperatives contribute directly to several SDGs, including poverty reduction (SDG 1), food security (SDG 2), gender equality (SDG 5), sustainable economic growth (SDG 8), and responsible consumption and production (SDG 12). By promoting sustainable farming practices and fostering rural development, cooperatives help communities build resilience and improve their quality of life. However, maximising their potential requires overcoming governance challenges, addressing resource constraints, and facilitating the adoption of modern technologies.

### **6.3 Conclusions on the Empirical Findings.**

Data was collected through semi-structured interviews with open-ended questions, focus groups, and the analysis of secondary data sources such as annual reports and policy statements. The target population for the study consisted of the board of directors of agricultural cooperatives in the KZN province, totaling 1877 individuals. Non-probability purposive sampling was used to ensure that participants could be easily reached and that the study's objectives would be met. Participants were selected from all levels of the cooperative organisations to capture different points of view, thoughts, and situations, allowing for rich and diverse data to be obtained.

Data were collected from fifteen (15) in-depth interviews with participants who shared their opinions and experiences regarding agricultural cooperatives' contribution to sustainable livelihoods. Thematic data analysis was conducted using NVIVO 14 software system analysis, which uncovered recurring themes. These themes formed the basis for the facilitation of the focus group discussions, which were conducted with thirty-two (32) participants. The findings from the analysed data, therefore, served as the foundation for the proposed recommendations. These findings shed light on the practical impact of cooperatives on rural livelihoods, focusing on environmental, social, and economic sustainability.

#### **6.3.1 Objective One**

**To establish the influence of agricultural cooperatives on rural livelihoods in respect of environmental sustainability.**

Agricultural cooperatives play a crucial role in promoting environmentally sustainable practices. Participants in the study emphasised the importance of conservation farming, organic farming, water harvesting, and pollution prevention. Cooperatives help members adopt eco-friendly farming practices, such as the use of organic fertilizers and composting, and encourage the responsible use of natural resources like water. For example, some cooperatives engage in water harvesting during the rainy season to ensure sustainable water use throughout the year. Additionally, cooperative members are encouraged to avoid harmful practices such as burning dry grass and cutting down trees, which contribute to environmental degradation. These practices help protect the land and natural resources for future generations. Despite these positive developments, participants also reported challenges related to unpredictable rainfall and other environmental factors. Some cooperative members were forced to cultivate crops in wetland areas due to insufficient rainfall, raising concerns about long-

term environmental sustainability. The study highlighted the need for integrating climate resilience into cooperative farming practices to mitigate the effects of climate variability.

### **6.3.2 Objective Two**

**To establish the influence of agricultural cooperative on rural livelihoods in regards to social sustainability.**

Cooperatives foster social sustainability by creating opportunities for marginalised groups, such as women, youths, and people living with disabilities. The cooperative model promotes inclusivity, allowing these groups to participate in decision-making processes and take leadership roles within their cooperatives. This collective approach helps strengthen community bonds and ensures that vulnerable members are supported both economically and socially. Participants highlighted how cooperatives provide a platform for empowerment and social cohesion. For instance, women and youth are given opportunities to contribute to agricultural activities, allowing them to improve their livelihoods and gain a sense of independence. Additionally, cooperatives help individuals overcome social barriers by promoting cooperation and mutual support within their communities. Conflict resolution is another critical aspect of social sustainability within cooperatives. Participants emphasised the importance of maintaining open communication channels and using regular meetings to address issues. Legal frameworks and governance structures also play a role in ensuring that conflicts are resolved fairly and efficiently, promoting harmony within the cooperative.

### **6.3.3 Objective Three**

**To establish the influence of agricultural cooperative on rural livelihoods in respect of economic sustainability.**

Agricultural cooperatives are vital in promoting economic sustainability in rural communities. Through collective resource pooling and knowledge sharing, cooperatives help farmers improve their agricultural practices and gain access to larger markets. This collective approach enhances productivity and provides opportunities for cooperative members to secure contracts with supermarkets, hospitals, and other institutions that purchase their produce. For many cooperative members, the economic benefits of participating in a cooperative are substantial. Members often receive both monetary and non-monetary rewards, such as food for their families. However, income variability remains a significant challenge, as cooperative members may experience fluctuations in their earnings due to external factors like weather conditions. Some participants reported receiving produce instead of cash as compensation, which, while beneficial for food security, presents

challenges for financial stability. Cooperatives also help create employment opportunities in rural areas, contributing to poverty alleviation and economic empowerment. By providing jobs within the agricultural sector, cooperatives enable members to become self-sufficient and improve their livelihoods.

One of the most critical roles of agricultural cooperatives is improving food security and alleviating poverty in rural communities. By producing affordable, nutritious food, cooperatives ensure that members and their families have access to essential resources. Participants in the study consistently highlighted the importance of cooperatives in reducing hunger and improving health within their communities. Cooperatives enable rural farmers to grow food that meets both their household needs and the needs of the wider community. Through collective action, cooperatives can produce and distribute food at affordable prices, thereby contributing to the overall food security of the communities.

#### **6.3.4 Objective Four**

**To identify the challenges faced by agricultural cooperatives in KwaZulu-Natal, South Africa, and assess their influence on the sustainability of rural livelihoods.**

Agricultural cooperatives in KwaZulu-Natal face several challenges that hinder their ability to fully support sustainable rural livelihoods. A major challenge is the limited access to modern equipment, which affects productivity and efficiency. Environmental management difficulties, including unpredictable rainfall patterns, force cooperatives to engage in less sustainable farming practices, such as cultivating in wetland areas. External interference, particularly from government officials, also undermines cooperative operations, creating conflicts and disrupting internal governance. Governance issues within cooperatives, such as poor decision-making, misuse of power, and inadequate management structures, further exacerbate these challenges. Cooperatives often lack the necessary leadership skills and transparency, leading to inefficiencies in operations. The inconsistent training of members and insufficient government support hinder their potential growth and effectiveness. Overall, these challenges significantly impact the ability of agricultural cooperatives to foster sustainable livelihoods and ensure long-term resilience for their members and communities.

#### **6.3.5 Objective Five**

**To provide recommendations for enhancing the agricultural cooperatives on the sustainability of rural livelihoods in KwaZulu-Natal.**

To enhance the role of agricultural cooperatives in promoting sustainable rural livelihoods in KwaZulu-Natal, several recommendations are proposed. First, improving access to modern farming equipment and resources is essential for increasing productivity and promoting sustainable farming practices. Targeted government support in the form of funding, equipment provision, and technical assistance can significantly boost cooperative efficiency. Secondly, enhancing governance within cooperatives is critical. Providing leadership training, fostering member participation in decision-making, and implementing stronger regulatory frameworks will ensure better governance and accountability. These efforts will reduce internal conflicts and promote transparency. Thirdly, increasing collaboration with government and non-governmental organisations can provide cooperatives with necessary training and resources. Continuous education for members on sustainable agricultural practices and climate resilience will also enable cooperatives to overcome environmental challenges. Lastly, strengthening cooperative networks and encouraging collective action will improve market access and economic opportunities, ensuring long-term viability and better livelihoods for cooperative members. The proposed model emphasised the role of government, traditional leaders, enabling agencies, businesses, and service providers in fostering an ecosystem that supports cooperative growth, contributing to sustainable rural development and improved livelihoods. Collectively, these results offer insightful information about the diverse methods and alliances needed to strengthen the influence of agricultural cooperatives on the sustainability of rural livelihoods in the area.

#### **6.4 Summary of the Key Findings**

The study embarked on a comprehensive exploration of the influence of agricultural cooperatives on the sustainability of rural livelihoods in KZN, South Africa, focusing on five distinct objectives. The first objective shed light on the significant contribution that agricultural cooperatives make to environmental sustainability. The participants exhibited a strong dedication to environmentally conscious practices, adopting sustainable and organic farming techniques that reduced the use of hazardous chemicals and gave priority to responsible land management. The harvesting of rainwater and the reduction of pollution have become essential components of water resource management. The second objective emphasised how important agricultural cooperatives are to supporting social sustainability. Research has indicated that cooperatives have a positive influence on food security, poverty reduction, and nutritional well-being in their communities by promoting community support, effective communication, and teamwork. Furthermore, they were essential in empowering disadvantaged groups and encouraging inclusive decision-making procedures. Although external

conflicts presented difficulties, cooperatives demonstrated their capacity to promote peaceful social settings.

The third objective focused on the economic sustainability of agricultural cooperatives. It was discovered that these cooperatives were excellent at working together, mobilising resources, exchanging information, and cooperatively acquiring agricultural supplies. Cooperatives increased members' earnings, produced jobs, and increased their power in decision-making by obtaining market access, establishing alliances, and promoting beneficial policies. The fourth objective examined the challenges that KZN's agricultural cooperatives face. Significant obstacles were a lack of resources, aging memberships, poor equipment access, and water scarcity. Furthermore, these cooperatives' ability to reach their full potential was hampered by historical injustices and broken government pledges. However, the research emphasised the beneficial socio-economic effects of cooperatives, such as increased market access, stable job possibilities, and better food security.

The fifth objective provided insightful recommendations for enhancing the sustainability of rural livelihoods through agricultural cooperatives. The significance of community engagement, education, and stakeholder collaboration was underscored, emphasising the need for sensitisation about the cooperative model. Education and training emerged as critical components of cooperative success, equipping members with essential skills. Additionally, promoting a conducive environment, engaging marginalised groups, and implementing diverse agricultural livelihood strategies were identified as essential steps for achieving positive outcomes such as employment creation, food security and gender equity. The proposed model stressed the role of government, traditional leaders, enabling agencies, businesses, and service providers in creating an ecosystem that supports cooperative growth, contributing to sustainable rural development and improved livelihoods. By and large, the study's multifaceted findings shed light on the complex dynamics between agricultural cooperatives and rural livelihood sustainability, presenting a roadmap for positive change in KZN's communities.

### **6.5 Contributions to the Body of Knowledge**

Several studies have examined the economic contributions of cooperatives in developing economies, including South Africa. For instance, Mohlala (2020) conducted research on the role of cooperatives in local economic development, concluding that they are critically important for fostering economic growth at the local level. Also, Rena (2021) undertook a study to explore the contribution of cooperatives to the economic development of South Africa in the post-independence period. The

study is significant as it highlights the vital role cooperatives play in promoting economic empowerment in the Republic of South Africa. Similar to Rena (2021), Zhang et al. (2021) conducted research on enhancing the contribution of cooperatives as vehicles for local economic development in developing countries.

Despite the expanding corpus of research on cooperatives, relatively few studies explore their benefits to the sustainability of livelihoods. Natural resources like land, water, forests, cattle, and human capital are essential to rural livelihoods (Jackson, 2021). It has been assumed that, in addition to the public and private sectors, cooperatives, being the third economic sector in most countries, play an important role in improving rural livelihoods (Serra & Davidson, 2021). Therefore, it is worth studying whether these cooperatives are effectively addressing natural resources, social aspects, and economic development to promote the sustainability of rural livelihood improvement. This study makes a significant and valuable contribution to the body of knowledge in the domain of agricultural cooperatives and rural livelihood sustainability. While previous research has explored the economic contributions of cooperatives in developing economies, the current study takes a more holistic approach by investigating their multifaceted impacts on ecological, social, and economic dimensions within the specific context of KZN, South Africa.

The study was conducted in the KZN province, South Africa, with an emphasis on exploring the influence of agricultural cooperatives on the sustainability of rural livelihoods and ascertaining optimal strategies for agricultural cooperatives to contribute effectively to sustainable livelihoods in South African rural contexts. Other developing countries may find value in these findings and strategies developed throughout the study. This knowledge may be used by policymakers and the cooperative movement to effectively manage cooperatives for the best interests of rural communities.

The complex interactions between agricultural cooperatives and environmental sustainability are further hypothesised in this study. The research emphasises the critical role cooperatives play in promoting environmentally friendly approaches to agriculture by stressing the dedication of cooperative members to organic and sustainable farming practices, pollution reduction, and responsible land management. The conversation on sustainable agricultural methods is enhanced by this focus on conservation farming and environmental awareness, which brings a fresh perspective to the understanding of cooperatives' contributions to rural livelihood sustainability.

Furthermore, the study's exploration of social sustainability aspects is a notable addition to the existing literature. The findings shed light on how agricultural cooperatives serve as catalysts for community support, inclusivity, and empowerment. The study's emphasis on the role of cooperatives in addressing food security, poverty reduction, and promoting equality among marginalised groups contributes to a more comprehensive understanding of the social dynamics at play within rural communities. This insight into the cooperative model's potential to foster harmonious and just social environments adds depth to discussions on social sustainability within the cooperative context.

In addition, the research's identification of challenges, benefits, and strategies associated with agricultural cooperatives provides actionable insights for policymakers, practitioners, and researchers alike. By addressing resource constraints, government support gaps, and misconceptions about cooperatives, the study offers a roadmap for enhancing the effectiveness of these organisations in driving positive change. This practical orientation and strategic approach to cooperative development serve as a valuable resource for stakeholders seeking to harness the full potential of cooperatives for sustainable rural livelihoods not only in South Africa but also in other similar contexts around the world. Overall, the study significantly enriches the body of knowledge by uncovering the detailed and multifaceted influences of agricultural cooperatives on rural livelihood sustainability and providing concrete strategies to optimise their contributions. The study is noteworthy because it adds methodologically to the body of knowledge about how agricultural cooperatives are essential for balancing the economic, environmental, and social aspects of sustainability. Therefore, the study has the potential to shed light on the applicability of this farming cooperative model for rural people's sustainable means of subsistence.

Lastly, the proposed model for enhancing the agricultural cooperatives on the sustainability of rural livelihoods provides a significant contribution to the body of knowledge by offering a comprehensive framework designed to enhance the sustainability of rural livelihoods through agricultural cooperatives. Rooted in both theoretical and empirical research, the model integrates best practices from previous studies and adapts them to the specific context of KwaZulu-Natal, South Africa. By considering the dynamic interplay of factors such as community engagement, cooperative legitimacy, and personal assets, the model emphasises a holistic approach to cooperative management and sustainability. It also highlights the importance of creating supportive environments and fostering inclusive participation to drive social and economic empowerment. This model

contributes to the literature by offering a practical tool for policymakers and cooperative managers to improve cooperative governance and sustainability within rural development contexts.

## **6.6 Study Conclusion**

The study conducted a thorough investigation into the influence of agricultural cooperatives on the sustainability of rural livelihoods in KwaZulu-Natal, South Africa. It revealed the significant role that cooperatives play in advancing social, economic, and ecological sustainability in rural areas. Agricultural cooperatives have demonstrated their capacity to drive environmentally friendly practices by promoting organic farming, conservation agriculture, and pollution reduction. Through responsible land management and eco-friendly farming techniques, these cooperatives contribute to the broader goals of sustainable development, highlighting their crucial role in preserving agricultural productivity and the environment.

Socially, agricultural cooperatives are transformative agents of change, promoting inclusivity, empowerment, and community support. By addressing critical issues such as food security, poverty alleviation, and gender equality, these cooperatives serve as catalysts for social development. They foster cohesive and just social environments by nurturing unity, communication, and collaboration among community members. This underscores the cooperatives' dual function, not only as economic entities but also as agents of social transformation in rural contexts.

Economically, cooperatives enhance rural development by facilitating knowledge sharing, collaborative resource mobilisation, and improved market access. Cooperative efforts enable members to acquire essential skills, connect with markets, and advocate for favorable policies, all of which lead to increased individual incomes and the creation of job opportunities in rural communities. The findings highlight the importance of cooperative strength, advocacy, and collaboration in driving economic sustainability, reinforcing the cooperative model's role as a vital contributor to rural economic growth.

From a management perspective, agricultural cooperatives have the potential to be powerful drivers of positive change and sustainable rural livelihoods. However, the study identified several challenges that threaten their success, including resource constraints, aging membership, and limited access to modern equipment. These issues require the attention of policymakers, cooperative leaders, and community members. Stakeholders must work together to enhance stakeholder engagement,

establish stronger cooperative institutions, and increase government support to unlock the full potential of cooperatives.

A supportive legal framework is essential to the long-term success of agricultural cooperatives. Post-apartheid reforms democratised access to cooperative benefits, empowering marginalised groups. However, ongoing challenges in governance, resource mobilisation, and access to education must be addressed to fully harness the transformative potential of cooperatives. By aligning with global sustainability goals, such as those set out in the UN Sustainable Development Goals (SDGs) related to poverty reduction, food security, gender equality, and economic growth, agricultural cooperatives can maximise their positive impact.

In conclusion, agricultural cooperatives play a pivotal role in promoting sustainable rural livelihoods in KwaZulu-Natal. By addressing environmental, social, and economic components, they serve as crucial institutions for rural development. However, ongoing support from government programs, targeted education, and modernisation efforts are essential to ensure cooperatives continue to drive sustainable change in rural communities.

## **6.7 Recommendations for enhancing the agricultural cooperatives on the sustainability of rural livelihoods**

This section outlines key recommendations aimed at enhancing the role of agricultural cooperatives in promoting the sustainability of rural livelihoods. These recommendations are based on the findings of the study and focus on addressing identified challenges, improving cooperative governance, and fostering sustainable agricultural practices. The following strategies are proposed to optimise the impact of cooperatives on rural communities.

### **i). Policy and regulatory support**

In order to create an environment that supports the growth and sustainability of agricultural cooperatives, it is advised that many stakeholders, especially government authorities, work together to support policies and regulations. This entails creating laws and regulations that provide incentives for the creation, management, and advancement of cooperatives. Governments can promote cooperative growth through tax breaks, subsidies, and faster cooperative registration procedures. The provision of specific funding for capacity-building initiatives, technical assistance, and cooperative model education can furnish cooperative members with vital competencies and promote their prosperity. Adopting laws and regulations that support cooperatives also contributes to the creation

of a favorable legal environment that promotes cooperative operations and safeguards the interests of members. The implementation of this recommendation seeks to provide the necessary policy support and guidance for agricultural cooperatives to thrive, thereby contributing to the sustainability of rural livelihoods through improved cooperative effectiveness and community development.

### **ii). Capacity-building and training**

The crucial function of the cooperative principle of education, training, and information is highlighted by the remark that it has substantial relevance in cooperative development. It is therefore highly advised that capacity-building and training be given top priority in order to equip agricultural cooperative members with the information, abilities, and resources they need to increase the effectiveness of their cooperative and support the sustainability of rural livelihoods. This entails creating and putting into action extensive training curricula covering a wide range of topics, such as cooperative management, modern farming methods, financial literacy, marketing strategies, and leadership ability. These training initiatives should be tailored to specifically address the distinct needs and challenges confronted by cooperative members, ensuring their preparedness to navigate within agricultural production, business operations, and community involvement. The concept of capacity-building also extends to cultivating a culture of perpetual learning within cooperatives, thereby enabling members to adeptly respond to evolving circumstances, technologies, and market dynamics.

### **iii). Market access and value chain integration**

Value chain integration and market access must be strategically prioritised in order to support the growth of agricultural cooperatives. To increase the sustainability of rural livelihoods, strong links between agricultural cooperatives and larger markets must be built, and they must be smoothly integrated into value chains. This means developing strategic alliances with major distributors, retailers, processors, and market participants to guarantee that cooperative products efficiently reach a larger range of consumers. Cooperatives can increase their overall economic viability, reduce post-harvest losses, and obtain better value for their produce by accessing large markets. Value chain integration includes a variety of tasks like improving product quality, standardisation, packaging, and branding, which guarantees that cooperative items comply with laws and market demands. Furthermore, this recommendation stresses the adoption of technology-driven solutions to streamline supply chain logistics, optimise distribution networks, and facilitate cooperative access to both local and international markets.

#### **iv). Financial support and access to credit**

It is also recommended that marginalised agricultural cooperatives, such as those comprised of Black citizens, have financial support and credit availability. These cooperatives need better access to credit facilities and adequate financial resources, just like any other business. With this assistance, cooperatives may be able to make investments in vital resources like infrastructure, inputs, and contemporary farming machinery. Financial support also makes it possible for cooperatives to engage in value-added activities like processing and packaging, which can greatly improve their overall profitability and competitiveness. Furthermore, by making financing more accessible, cooperatives are better equipped to handle seasonal variations, react quickly to market demands, and skillfully handle unforeseen obstacles. Cooperatives can get attractive loan conditions, thorough financial management training, and a solid credit profile by cultivating strategic collaborations with financial institutions, governmental bodies, and development organisations.

#### **v). Promote gender equity and social inclusivity**

It was recommended to advance social justice and gender parity. Establishing a fair and inclusive atmosphere in agricultural cooperatives is important. This entails tackling gender inequality head-on and making sure that everyone, even the disadvantaged groups, is meaningfully involved in group projects and decision-making. This can be done through putting regulations in place that support equitable representation, offering programs for training and capacity-building that empower women and other marginalised groups, and spreading awareness of the importance of different points of view. In order to rectify historical injustices and provide marginalised groups like smallholder farmers and indigenous tribes the opportunity to fully benefit from cooperative ventures, it is imperative that these groups be acknowledged and supported.

#### **vi). Empower youth engagement**

Another significant finding highlighted the absence of young people within agricultural cooperatives. Encouraging youth involvement has been found to be essential to maintaining the sustainability and vitality of rural livelihoods. Cooperatives should aggressively engage and empower youth through specialised training programs, mentorship opportunities, and platforms that magnify their voices in light of the demographic shift toward younger generations. Cooperatives have the ability to invigorate rural communities, encourage innovation, and draw young people into agriculture by providing opportunities for skill development, leadership training, and assistance for

entrepreneurship. This approach not only guarantees the sustainability of cooperatives by transferring traditional knowledge but also introduces fresh perspectives and ideas that can amplify productivity, diversify agricultural practices, and bolster the overall resilience of rural livelihoods.

#### **vii). Vertical agriculture**

Limited land access is one of the many difficulties that South African agricultural cooperatives in KZN encounter. A crucial recommendation for improving their sustainability and resolving the land access problem is the use of vertical agriculture. There are various benefits to vertical farming, which combines hydroponic or aeroponic systems with stacked layers or slanted surfaces. It enables cooperative members to make the most use of their land, grow crops all year round, and lessen the region's chronic water shortage problems. Furthermore, by promoting crop diversity and lowering the need for manual labor, vertical agriculture appeals to a younger demographic. Government and cooperative organisations should offer financial assistance, technical training, and resource access to help with this transformation. By embracing vertical agriculture, agricultural cooperatives can optimise land use, increase productivity, and contribute to the sustainable livelihoods of rural communities in KZN.

#### **6.8 Limitations of the Study**

The study, while valuable in its exploration of the influence of agricultural cooperatives on rural livelihood sustainability in KZN province, is not without limitations. The research was restricted to the KZN province due to time and resource constraints, which is one major constraint. This decision, while practical, restricts the study's ability to offer a comprehensive understanding of the broader South African context or other emerging economies globally. The assumption that findings from KZN can be extrapolated to represent other provinces or similar contexts may not account for the unique dynamics and variations that exist across different regions, potentially limiting the study's applicability to broader settings.

Another limitation arises from the inability to access remote parts of the KZN province for data collection due to resource constraints. Due to the exclusion of voices and experiences from locations that were not represented, this selective sampling may unintentionally generate prejudice. If the results are taken to represent the province as a whole, then potential differences in cooperative practices, difficulties, and contributions between KZN's many regions may be overlooked.

The study's methodology, which included qualitative data collection methods such as interviews and focus group discussions, presents another limitation. While these methods offer rich insights into participants' perspectives, they inherently lack the statistical rigor required for generalisability. The research findings are context-bound and cannot be confidently extended to larger populations beyond the participants who were directly involved. Furthermore, analysing both interview and focus group data required extensive time and resources, leading to potential challenges in meeting research timelines and maintaining a cohesive analytical framework.

The language barrier and cultural differences posed additional limitations. Conducting research in a region with diverse languages and cultural distinctions can impact the depth and accuracy of data collected. The researcher's reliance on interpreters and the use of English as a medium of communication could have introduced misinterpretations or hindered participants' ability to fully express themselves in their native languages. This linguistic and cultural gap might have influenced the depth of insights gathered, potentially leading to the omission or distortion of key information (Campbell et al., 2020).

Participant refusal to engage with the researcher due to their foreign status introduces another limitation. Some participants' hesitance to converse with a researcher from outside their community could have resulted in valuable perspectives being left unexplored. Furthermore, participants' demands for cooperative leadership presence during interactions may have inhibited open communication, which could have compromised the sincerity of their contributions since they were afraid of being watched or faced with retaliation.

Last but not least, the selection of participants from cooperatives in the province may limit the generalisability of the findings. These participants could be motivated by specific cooperative interests, potentially skewing the research outcomes towards those particular perspectives. The absence of impartiality in participant selection could hinder the study's ability to offer a comprehensive and unbiased representation of the various dimensions of agricultural cooperatives in KZN. The selection of study participants should be deliberate, encompassing individuals who possess firsthand experience and observation of the phenomenon under investigation. This strategic participant selection aims to enable the researcher to gather diverse viewpoints and insights, facilitating the attainment of a collective agreement during the culmination of the research process (Pansera & Rizzi, 2020).

## **6.9 Suggestion to Further Studies**

In the future, the knowledge and understanding gained from this study will serve as a solid basis for directing investigations into agricultural cooperatives and the sustainability of rural livelihoods. A number of promising research directions come to light, all of which advance our knowledge of the opportunities and challenges that cooperatives present in a variety of settings.

First and foremost, more comprehensive research is required to explore the particular strategies that agricultural cooperatives use to successfully handle environmental challenges. Research may concentrate on methods for raising cooperative members' technical proficiency in water management, resolving issues with rainwater harvesting, and promoting a better awareness of sustainable agricultural methods. Exploring the long-term ecological impacts of these practices, as well as potential synergies with local ecosystems, would contribute to developing comprehensive sustainability frameworks tailored to specific geographical and climatic conditions.

Furthermore, studies in the future can focus on how social sustainability in cooperatives is changing over time. Studies could focus on the mechanics of resolving disputes and methods for reducing external conflicts that obstruct the growth of cooperative relationships. In addition, by comprehending the subtleties of how cooperatives empower marginalised groups and advance social inclusion, replicable strategies for promoting equality and community cohesiveness may become clear. New directions for cooperatively driven social transformation may be found by examining the interactions among social welfare programs, cooperative projects, and more general social development policies.

Future studies may, from an economic perspective, focus more on how to make cooperatives more resilient to obstacles like aging membership and resource scarcity. Investigating innovative funding mechanisms, cooperative business models, and alternative pathways for accessing essential resources could provide practical solutions to enhance the economic viability of these organisations. Additionally, a closer examination of the cooperative movement's potential to influence policy-making at regional and national levels could highlight pathways for cooperative advocacy and policy reform that ultimately contribute to a more favorable environment for their growth and success.

Finally, cross-contextual studies that contrast the experiences of agricultural cooperatives in various geographic areas may provide insightful information about opportunities, challenges, and best practices. These studies may provide insights into transferable strategies that help cooperative

models that work well be adapted to other environmental, cultural, and economic contexts. Such comparative studies could further a worldwide conversation about cooperatively driven rural development and advance our understanding of the global impact of cooperatives.

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## Appendices

### Annexure A: Information Sheet and Consent to Participate in Research

## UKZN HUMANITIES AND SOCIAL SCIENCES RESEARCH ETHICS COMMITTEE (HSSREC)


### APPLICATION FOR ETHICS APPROVAL For research with human participants

#### Information Sheet and Consent to Participate in Research

Date: 17/08/2022


Greetings,

My name is Julius Chiwawa, a PhD student from the School of management, IT and governance at the University of KwaZulu Natal, GSB Block Ground Floor Westville campus. My contact details are as follows: [220112524@stu.ukzn.ac.za](mailto:220112524@stu.ukzn.ac.za) cell number:

 You are being invited to consider participating in a study that involves research on the influence of agricultural cooperatives in the sustainability of rural livelihoods in KwaZulu-Natal, South Africa. The aim and purpose of this research is to explore the influence of agricultural cooperatives on the sustainability of rural livelihoods. The study is expected to include 373 agricultural cooperatives members in Kwazulu-Natal province. It will involve the following procedures: quantitative and qualitative research methods. The data will be gathered through one questionnaire to each 362 agricultural cooperatives in the province and 11 interviews with selected leaders from both the unions and apex of agricultural cooperatives in the province that will be used as a sampling frame. The duration of your participation if you choose to participate and remain in the study is expected to be approximately 20 minutes.

The study will involve no direct risks/discomforts. We hope that the study will provide no direct benefits to participants.

This study has been ethically reviewed and approved by the UKZN Humanities and Social Sciences Research Ethics Committee (approval number HSSREC/00004467/2022).

In the event of any problems or concerns/questions you may contact the researcher at  or email at [220112524@stu.ukzn.ac.za](mailto:220112524@stu.ukzn.ac.za) or the UKZN Humanities & Social Sciences Research Ethics Committee, contact details as follows:

**HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION**

Research Office, Westville Campus Govan  
Mbeki Building  
Private Bag X 54001  
Durban 4000 KwaZulu-Natal, SOUTH AFRICA  
Email: [HSSREC@ukzn.ac.za](mailto:HSSREC@ukzn.ac.za)

Your participation in the study is voluntary and by participating, you are granting the researcher permission to use your responses. You may refuse to participate or withdraw from the study at any time with no negative consequence. In the event of refusal/withdrawal of participation the participants will not incur penalty or loss of treatment or other benefits to which they are normally entitled. There will be no monetary gain from participating in the study.

Your anonymity will be maintained. All data, both electronic and hard copy will be securely stored during the study and archived for 5 years. After this time, all data will be destroyed.

If you have any questions or concerns about participating in the study, please contact me or my research supervisor at the numbers listed above.

BREC UKZN Oct 2008

1



Sincerely

Julius Chiwawa

## CONSENT TO PARTICIPATE

I ..... have been informed about the study entitled on the influence of agricultural cooperatives in the sustainability of rural livelihoods in KwaZulu-Natal, South Africa by Julius Chiwawa.

I understand the purpose and procedures of the study (which is to explore the influence of agricultural cooperatives on the sustainability of rural livelihoods in KwaZulu-Natal, South Africa).

I have been given an opportunity to ask questions about the study and have had answers to my satisfaction. I declare that my participation in this study is entirely voluntary and that I may withdraw at any time without affecting any of the benefits that I usually am entitled to.

If I have any further questions/concerns or queries related to the study I understand that I may contact the researcher at [REDACTED] or email at [220112524@stu.ukzn.ac.za](mailto:220112524@stu.ukzn.ac.za).

HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION

Research Office, Westville Campus Govan Mbeki Building

Private Bag X 54001 Durban

4000

KwaZulu-Natal, SOUTH AFRICA

Email: [HSSREC@ukzn.ac.za](mailto:HSSREC@ukzn.ac.za) Additional consent, where applicable I hereby provide consent to: Audio-record my interview / focus group discussion YES / NO

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**Signature of Participant**

---

**Date**

**Signature of Witness**

**Date (Where applicable)**

**Signature of Translator**

**Date (Where applicable)**

BRECUKZN Oct 2008

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## Annexure B: Ethical Clearance



14 July 2022

**Julius Chiwawa (220112524)**  
School Of Man Info Tech & Gov  
Westville Campus

Dear Julius Chiwawa,

**Protocol reference number:** HSSREC/00004467/2022

**Project title:** The influence of agricultural cooperatives on the sustainability of rural livelihoods in KwaZulu-Natal, South Africa.

**Degree:** PhD

### Approval Notification – Expedited Application

This letter serves to notify you that your application received on 08 July 2022 in connection with the above, was reviewed by the Humanities and Social Sciences Research Ethics Committee (HSSREC) and the protocol has been granted **FULL APPROVAL**.

**Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number. PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.**

This approval is valid until 14 July 2023.

To ensure uninterrupted approval of this study beyond the approval expiry date, a progress report must be submitted to the Research Office on the appropriate form 2 - 3 months before the expiry date. A close-out report to be submitted when study is finished.

HSSREC is registered with the South African National Research Ethics Council (REC-040414-040).

Yours sincerely,



\_\_\_\_\_  
**Professor Dipane Hlalele (Chair)**

/dd

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#### Humanities and Social Sciences Research Ethics Committee

Postal Address: Private Bag X54001, Durban, 4000, South Africa

Telephone: +27 10(31) 290 8350/4557/3587 Email: [hssrec@ukzn.ac.za](mailto:hssrec@ukzn.ac.za) Website: <http://research.ukzn.ac.za/Research-Ethics>

Founding Campuses:  Edgewood  Howard College  Medical School  Pietermaritzburg  Westville

**INSPIRING GREATNESS**

## Annexure C: Interview Guide

**Topic: The influence of agricultural cooperatives in the sustainability of rural livelihoods in KwaZulu-Natal, South Africa.**

### QUESTIONS TO BE ADDRESSED DURING THE INTERVIEW SESSIONS

#### 1. Section A: Preliminary questions

- 1.1 Name of the person being interviewed \_\_\_\_\_
- 1.2 Position \_\_\_\_\_
- 1.3 Name of the agricultural co-operative \_\_\_\_\_
- 1.4 When was the cooperative established \_\_\_\_\_
- 1.5 When was it registered at Companies & Intellectual Property Registration Office (CIPRO) \_\_\_\_\_
- 1.6 Purpose or sector of the co-operative? \_\_\_\_\_
- 1.7 What is the total memberships in your union/apex?

Type of membership	Total membership
Legal entities	
Natural persons	

1.8 How many employees do you have as a union/apex?

Total number of employees	Full time	Part time	Casual	Volunteerism	Other, please specify

#### Section B

2. *Can you give a brief background on the formation of your cooperatives?*
3. *How do you acquire farming inputs as agriculture cooperatives?*
4. *Who are the major customers of agricultural cooperatives?*
5. *Can you give details on how your agricultural cooperative sell its farm produce?*
6. **What are the environmental activities you are doing as an agricultural cooperative to sustain the rural livelihoods of your members and the general populace?**
  - 6.1 *What are you doing to have maintainable and workable communities?*
  - 6.2 *What are you doing to promote responsible production and responsible uses of farm produce?*
  - 6.3 *What are you doing to ensure you protect land and climate in general?*
  - 6.4 *What are you doing to protect water including underground water?*

**7. What are the economic activities you are doing as an agricultural cooperative to sustain the rural livelihoods of your members and the general populace?**

7.1 What are you doing to reduce poverty and hunger in your community?

7.2 What are you doing to promote good health and well-being of your members and community?

7.3 What are you doing to create good jobs and economic empowerment?

7.4 What do you do to boost food industry and infrastructure?

**8. What are the social activities you are doing as an agricultural cooperative to sustain the rural livelihoods of your members and the general populace?**

8.1 What are you doing to promote quality education to your members and community at large?

8.2 What are you doing to address gender equality and general inequality?

8.3 What are you doing to reduce conflicts and ensure there is justice to both members and community at large?

8.4 What are you doing to promote cooperation among members and community at large?

9. What are you doing as cooperative to maintain members' focus?

10. On average, how much does each member earn per month from cooperative activities?

11. In your own opinion, what are the main reasons why people in KZN province are forming or joining agricultural cooperatives?

12. What are the challenges being faced by agricultural cooperatives in your organization?

13. From your experience with cooperatives, what are the benefits of cooperatives in your local area? **(Examine benefits for both members and non-members.)**

14. As a cooperative member and a leader, what do you think should be done to improve the lives of the rural membership and communities in general?

## **Annexure D: Focus Discussion Guide**

**Topic: The influence of agricultural cooperatives in the sustainability of rural livelihoods in KwaZulu-Natal, South Africa.**

### **FOCUS GROUP QUESTIONS**

#### **Section A**

- 1.1 Positions \_\_\_\_\_
- 1.2 When was the cooperative established \_\_\_\_\_
- 1.3 What is the cooperative total membership? \_\_\_\_\_

#### **Section B**

**What is the influence of agricultural cooperatives on rural livelihoods in regards to economic sustainability?**

2. Why have you formed or joined agricultural cooperatives?
3. How many employees do you have as a cooperative?
  - a) Full-time
  - b) Part-time
  - c) Casual
4. How do you acquire farming inputs as an agriculture cooperative?
5. Who are your major customers, and how do you sell your farm's produce?
6. What are the economic activities you are doing as an agricultural cooperative to sustain rural livelihoods in terms of poverty reduction, good health and well-being, job creation, and infrastructure development? How does the principle of economic member participate apply to your coop?
7. On average, how much does each member earn per month from cooperative activities?

### **Section C**

**What is the influence of agricultural cooperatives on rural livelihoods in respect of environmental sustainability?**

8. What are the environmental activities you are doing as an agricultural cooperative to sustain rural livelihoods in terms of maintaining the community, promoting responsible production and consumption, and protecting land and water?

### **Section D**

**What is the influence of agricultural cooperatives on rural livelihoods in respect of social sustainability?**

9. What are the social activities you are doing as an agricultural cooperative to sustain rural livelihoods in terms of promoting education, reducing inequalities, conflict resolution, promoting justice, and promoting cooperation?

10. What are you doing as a cooperative to maintain members' focus?

### **Section E**

**How best can agricultural cooperatives contribute towards sustainable rural livelihoods in South African communities?**

11. What challenges are you facing as agricultural cooperatives?

12. What are the benefits of agricultural cooperatives to your (a) Members? (b) Non-members?

13. What do you think should be done to improve the livelihood of cooperative members and community?

**Annexure E: Gatekeeper's Letter**



**Physical Address** 380 Bosman Street  
LapaUitgewers Building  
1<sup>ST</sup> floor, Office No: 103  
Pretoria 0001

**Fax:** 086 605 0996 - **Tell:** +27 12 3235073

**Mobile:** +2 [REDACTED]

**Fax:** 086 538 4538

**Email:** [REDACTED]

**07 December 2021**

J Chiwawa (220112524)

University of KwaZulu-Natal  
School of Management, Information Technology and Governance  
College of Law and Management Studies  
Westville Campus  
**Durban**

**REF: GATEKEEPER'S LETTER: THE ROLE QOF AGRICULTURAL COOPERATIVE IN THE SUSTAINABILITY OF RURAL LIVELIHOODS IN KWAZULU-NATAL, SOUTH AFRICA** Dear Mr J Chiwawa

eratives in KwaZulu-Natal Province as  
d only be for the purpose of the  
ultural cooperatives in the  
ca.

u Natal should be filed with this office

Yours truly  
[REDACTED]

Mr.

South African National Tertiary Cooperative Limited (SANACO)

**SANACO Executive Board Members | President** Mr. Lawrence Bale, **Deputy President** Mr. Samuel Rakoto, **Secretary General** Mr. Muzi Phewa, **Deputy General Secretary** Mr. Lawrence Monyahi, **Treasurer** Ms Violet Ntibane.



## Annexure G: Language editor's confirmation letter



### *Proofreading Certificate*

It is hereby certified that this dissertation has been proofread and edited for spelling, grammar and punctuation by a professional English language editor from [www.OneStopSolution.co.za](http://www.OneStopSolution.co.za)

#### Client

Julius Chiwawa

The influence of agricultural cooperatives on the sustainability of rural livelihoods in KwaZulu-Natal,  
South Africa

A dissertation submitted in fulfillment of the requirements for the degree  
of Doctor of Philosophy  
at the University of KwaZulu-Natal, South Africa

#### Editor

Debby Dewes

-----  
Name

-----  
Signature

20 January 2025

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Date

I cannot guarantee that the changes that I have suggested have been implemented nor do I take responsibility for any other changes or additions that may have been made subsequently. The track changes of the language editing will be available for inspection upon enquiry, for a period of one year.

#### Contact

One Stop Solution  
10 [redacted]  
[redacted]

Port Elizabeth  
6045

Redene Wynand  
076 481 8341 / [redacted]  
[www.onestopsolution.co.za](http://www.onestopsolution.co.za)



UNIVERSITY OF  
**KWAZULU-NATAL**  
INYUVESI  
YAKWAZULU-NATALI

14 July 2022

Julius Chiwawa (220112524)  
School Of Man Info Tech & Gov  
Westville Campus

Dear Julius Chiwawa,

Protocol reference number: HSSREC/00004467/2022

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Degree: PhD

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Yours sincerely,



Professor Dipane Hlalele (Chair)

/dd

#### Humanities and Social Sciences Research Ethics Committee

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Founding Campuses: ■ Edgewood ■ Howard College ■ Medical School ■ Pietermaritzburg ■ Westville

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