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The Efficacy of Agricultural Cooperatives Towards Enhancing Food Security in Rural Areas: Mbombela Local Municipality, Mpumalanga Province

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Abstract. This paper aimed to explore the effectiveness of agricultural cooperatives towards the enhancement of food security in rural areas. The formation of agricultural cooperatives in South Africa is a prerequisite for obtaining government support concerning activities aimed at social and economic development. It is well-documented that agricultural cooperatives are business entities and vehicles for food security. However, this review sustained that agricultural cooperative do not completely alleviate the vulnerability of food-insecure households because of the dearth of institutional support and sufficient productive resources. Focus group discussions with six agricultural cooperatives and four face-to-face in-depth interviews with municipal officials were conducted to envisage the improvement of food security through agricultural cooperatives. Using thematic analysis to analyse data, findings confirmed that institutional support improves the efficiency of agricultural cooperatives at the local level. Furthermore, institutional support enhances productivity which renders the cooperatives as a supplementary intervention to food security. However, there is a gap in enabling access to agricultural inputs, such as funding for access to farming equipment. This paper recommends the implementation of a cooperative management structure to enhance planning, coordination, and monitoring. The municipality should review the agricultural cooperative governance frameworks to achieve enabling environments for farming activities.

Keywords. Agricultural cooperatives, efficacy, food security, institutional support, livelihoods, rural areas, vulnerabilities.

1. Introduction

At the national level, South Africa is considered food secure, but millions of people go to bed hungry (Hanoman, 2017). Looking at the poverty and drastic unemployment trends, no evidence qualifies South Africa as food secure at the household level. Statistics SA (2019) reports that South Africa is food secure on a national level, but insecure on a household level because not all these households have access to food. In the efforts to combat food insecurity, the agricultural sector remains one industry with tremendous potential for economic growth in South Africa, particularly in rural areas. Food insecurity in South Africa has resulted in the formation of several agricultural cooperatives that are set to be a solution for improving household food security and income. Therefore, agricultural cooperatives play a critical role in

addressing the global food crisis as an alternative means of income and food stability to the rural population (Gava et al.2021).

However, there is a persistent negative trend of food insecurity because of the challenges that impede growth in agricultural cooperatives. Ngwambe (2017), confirms that the failure of South African agricultural cooperatives was influenced by lack of access to agricultural inputs. Thus, the South African government development agencies aim to support agricultural cooperatives under the Cooperatives Act of 2005. Nevertheless, the challenge is that development agencies' assistance is unfocused, uncoordinated, and lacks a systematic and sustained focus on the development of agricultural management skills state (Department of Trade and Industry, 2012). Access to institutional support is one of the balancing assets for agricultural cooperatives because it provides extension support services. Improved food security is directly linked to effective capacity-building for emerging farmer's skills development and training. A new legal framework was established in 1994, the 1995 Agricultural White Paper, liberalizing and deregulating agricultural marketing, land reform and other aspects of agricultural policy state (Dyalvane, 2015). This was to introduce strategies that will enforce sustainable agricultural practices to address the national food crisis. The agricultural cooperative strategy is not unique to existing burial societies, stokvels, and savings clubs maintained by the urban and rural poor.

Food insecurity status in Mpumalanga necessitates the prioritization of agricultural cooperatives for rural development to improve rural emerging farmers. Xaba (2018) confirmed that cooperatives in Mpumalanga are formed as a means of economic development when members or small producers' band together to capture economies of scale and thus bargaining power. Mbombela Local Municipality served as an ideal location for this study, due to its economic and social status, which indicates the potential for increased impact in economic activities such as agricultural production. Development Economists (2015) indicated that Mbombela Local Municipality is ideally located for an expanding agricultural sector, with developments such as the National Fresh Produce Market provide an opportunity for local farmers to have better access to markets. However, achieving safe and sustainable food production is a constant challenge, with emerging farmers constantly struggling to improve production and income. Despite national economic development strategies, many South Africans are still unable to obtain enough food. Govender et al. (2017), state that approximately 20% of South African households had insufficient access to food in 2017. Africa Research Bulletin (2020) reported that there are no subsidies to make food more affordable, no considerations around giving farmers incentives so that the value is passed down the chain. Poor food production has consequences for vulnerable households, such as hunger, malnutrition, and a variety of other household challenges.

2. Methodology

This study was conducted in the rural areas of Kanyamazane, Nyongani and Clau-clau, located in the municipality of Mbombela, where the agricultural sector is expected to play a significant role in local economic development. Mbombela is part of Ehlanzeni District Municipality, in the province of Mpumalanga. The study used interpretivism research paradigm interpret the experiences and opinions the agricultural cooperatives, agricultural extension officers and municipal officials. The study confirmed that there are many ways of understanding agricultural cooperatives on the phenomenon being studied. The concept of agricultural cooperatives and food security are socially constructed and therefore have different meaning to different people. Qualitative research approach was used to provide an in-depth understanding of the perspectives, attitudes and behaviour patterns of the agricultural cooperatives and other

studied participants, which could have not been fully captured by other modes of research approach. The detailed understanding of the issues in hand was achieved by interacting and talking directly with the members of the agricultural cooperatives and the government officials and allowing them to tell their stories. Table 1.1 illustrates how agricultural cooperatives and government officials were organized.

Table 1.1: Arrangements for Data Collection with Participants

<i>Agricultural Cooperatives (Pseudonyms)</i>	<i>Study Area (Field/site)</i>	<i>No. of Participants per Focus Group Discussion</i>	<i>Duration of the Focus Group Discussion and Interviews (Minutes)</i>	<i>Data collection date</i>
<i>Cooperative A</i>	Nyongane	5	46:56	29 September 2020
<i>Cooperative B</i>	Nyongane	4	20:42	29 September 2020
<i>Cooperative C</i>	Clau-Clau	4	35:36	30 September 2020
<i>Cooperative D</i>	Clau-Clau	4	27:47	30 September 2020
<i>Cooperative E</i>	Kanyamazane	5	25:21	01 October 2020
<i>Cooperative F</i>	Kanyamazane	4	21:15	01 October 2020
<i>Key Informants (Agriculture and local municipality)</i>				
<i>Extension Officer A</i>	Agricultural Affairs	1	04:31	29 September 2020
<i>Extension Officer B</i>	Agricultural Affairs	1	12:00	30 September 2020
<i>Municipal Manager A</i>	Mbombela local municipality	1	21:00	04 October 2020
<i>Assistant Municipal Manger B</i>	Mbombela local municipality	1	05:00	04 October 2020

Source: (Author's own, 2020)

In this study agricultural cooperatives were organized into six separate groups and government officials were interviewed to obtain in-depth information by probing. Confidentiality was observed by using pseudonyms to describe both the agricultural cooperatives and government officials that were involved in the study. Thematic analysis was used to analyse data of this study and providing an easily interpretable and concise description of the emergent themes and patterns within collected and recorded data. Focus group discussions and interviews were reviewed and analysed prior to ensure trustworthiness, credibility, comfortability, dependability, and transferability.

3. Literature Review

Agricultural cooperatives in a global and African context

Agricultural cooperatives are primarily recognized as business entities in developed and developing countries, competing in the marketplace with other large-scale entities. They provide small-scale farmers with collective, countervailing power in the marketplace (Abate, 2018). Agricultural cooperatives play an important role in many national economies, and they create many employment opportunities in Africa and worldwide. Cooperatives have a comparative advantage in terms of job creation over other types of businesses because they are labor-intensive by nature, they are cost-effective due to member commitment and participation which makes job creation sustainable (Brixiová, Kangoye and Yogo, 2020). Consequently, the commitment and participation of cooperative members encourage agricultural cooperatives to be an excellent tool for increasing agricultural production through new agricultural skills development and market accessibility (Mwadzingeni et al., 2020).

Agricultural cooperatives improve not only production but income for emerging and small-holder farmers in both developing and developed countries precisely. Xaba (2018) attests those agricultural cooperatives are efficient and profitable organizations that can withstand economic shocks and achieve economic gains for their members including improved income. Appropriate policies and legal structures are regarded as critical for effective agricultural cooperatives in an African context to achieve long-term livelihood outcomes. As a result, appropriate policies such as the cooperative Act of 2005 allows identification of livelihood-related opportunities and constraints agricultural cooperatives face to provide access to various types of assets such as capital (Food and Agriculture Organisation, 2021). Food insecurity trends around the world are causing a delay in meeting the Sustainable Development Goal: To ending hunger by 2030. A blueprint is needed to guide the provision of agricultural support services from legal structures in developing countries. Ibnu, Offermans, and Glasbergen (2018) attest that public support measures must be made available to enforce the policy and legal framework that supports weak agricultural cooperatives. The results indicate that the effectiveness of these measures is linked to capacity building (in the sense of human capital) which is required for improved financial support and promotion of farmer organizations (Ribašauskienė et al., 2019).

Ethiopia is one of the developing countries that has documented the efficiency of agricultural cooperatives because of effective public support measures. The adoption of agricultural cooperatives for rural areas in Ethiopia has encouraged not only food production but also job creation, empowered disadvantaged groups, particularly women, and promoted social stability and integration (Tefera, Bijman, and Slingerland, 2017). Cooperatives in South Africa are currently confronted with a slew of challenges about cooperative productivity. Poor infrastructure and limited access to local agricultural support, such as extension services, make it difficult to locate agricultural cooperatives in rural areas. Many agricultural cooperatives are in remote areas where farming has traditionally been a survival factor. Khapayi and Celliers (2016) maintain that a better understanding of the specific factors limiting emerging farmer's development is critical to effectively prepare policies, development strategies, programs, and models aimed at supporting and enhancing the transition of emerging farmers into commercial agricultural farming.

Rural infrastructure development is a limiting factor for the development of emerging farmers and therefore, an essential for agricultural cooperatives and overall economic growth. Infrastructure development is still a challenge for farmers in rural areas, there is still a lack of availability and access to infrastructures such as abattoirs, storage, processing, and trading facilities contributes to a barrier to market participation (Mazibuko et.al., 2018). This, in turn, necessitates a targeted approach to achieve rural development within agricultural cooperatives. According to Fungo, Krygsman, and Nel (2017), there is a need to build a basic infrastructure to support agriculture, production, transportation, marketing, and other agricultural

development-related activities. The agricultural industry experts need to invest in infrastructure to become a more significant contributor to the economy and to better ensure food security for agriculture to remain an important contributor to the economy and food security state (Arnoldi, 2021).

Agricultural cooperatives as a business model and vehicle to food security

Agricultural cooperatives have recently been adopted as a business model by governments and emerging farmers, who are generally readily tolerated and welcomed by the state in rural areas (Khapayi and Celliers, 2016). Many factors influence the formation of agricultural cooperatives in rural areas including addressing common needs and challenges faced by small-scale farmers. Mohlala (2018) argues that the concept of cooperation can be used to describe various types of group activity, a cooperative is one of the viable economic vehicles for improving socio-economic conditions. For this purpose, small-scale farmers apply a business model by collaborating primarily to assist one another in producing and selling their products. Cooperatives are organizations owned and controlled by their members that can operate in the formal and informal marketplace and seek to find a balance between profit and serving their members' common social and cultural needs and ambitions (Rodgers, 2015). As a result, agricultural cooperatives can be described as an innovative strategy to achieve sustainable livelihood outcomes such as improved income and food security.

Agricultural cooperatives are profit-oriented and a primary source of employment in rural areas, cooperatives share amongst their members the sale earnings and profits from production. This idea of people and farmers coming together for a common purpose, especially in rural areas, is not a new phenomenon. In the past, small-scale producers have partnered together to sell their products to a wide variety of markets (Thaba and Mbohwa, 2015). Thus, recognizing agricultural cooperatives as an organizational solution for the high transaction costs that farmers usually encounter when buying farm inputs and selling farm products which, in turn, contribute to the economic freedom of small-scale farmers and the development of the country (Thaba and Mbohwa, 2015). These cooperatives provide incentives for small agricultural producers and a wide range of services, including increased access to markets, natural resources, information, communications, technology, finance, training, and warehouses (Zhu, Wachenheim, Ma and Zhu, 2018). Agricultural cooperatives have made a positive contribution towards the rising demand for food as a means of achieving food security (Food and Agriculture Organisation, 2012). Many years later they remain viable in improving rural communities' livelihoods, with many members relying on the income generated from production and farm job opportunities (Malomane, 2019).

Agricultural cooperatives are well-known for being an effective means of achieving socio-economic conditions, many of which are established community-based enterprises, by community members and for community members to produce and access food at a low-cost price. Singh et al. (2019) support that the cooperative strategy provides a pool of money from selling crops and livestock to people with little or no capital to help create jobs and economic growth. Fedorova and Taaricht (2020) state that cooperatives employ over 100 million people worldwide contributing immensely to household income and food security of small-scale farmers. Thus, making the agricultural cooperatives business model the primary source of employment and income generation in rural areas (Cishe and Shisanya, 2019).

4. Results and Discussion

This section offers a thorough overview of agricultural cooperatives as a vehicle to improve food security. The perceptions and views of municipal officials were instituted by their

experiences in the provision of extension support services, which demonstrated a clear understanding of the challenges and opportunities that hinder the successful contribution of cooperatives towards food security.

Formation of Agricultural Cooperatives

Agricultural cooperatives have become a mechanism for addressing broad challenges such as poor access to the market and livelihood strategy. Before the formation of cooperatives, agricultural cooperative A was a group of small-scale farmers struggling to grow their produce effectively because of inadequate support for agricultural inputs. The cooperative strategy has focused on the primary goal of any agricultural producer, which is to generate profit from sales. The study showed that agricultural cooperatives are formed independently from government initiatives within the agricultural sector, making the cooperatives privately owned business entities. However, in contrast to extension officers, the Department of Agriculture, Rural Development, Land and Environmental Affairs (DARDLEA) in South African is responsible for the formation of agricultural cooperatives in the local municipality. Extension officer B noted that the formation of cooperatives under the DARDLEA, food security programmes was introduced to make it easy for extension officers to monitor and evaluate the contribution of small-scale farmers towards improving food security in rural areas.

Municipal officials indicated that before the establishment of the food security programmes, they were unable to track the progress of small-scale farmers because they were no clear mandate as to what the responsibility of extension support services for rural emerging farmers was. Municipal officials stated that the role of the DARDLEA food security programme is to ensure that by 2015, all vulnerable and poor households will have access to affordable and diverse food through the coordination and implementation of food security targeted programs. On the contrary, findings revealed that six years later after the target timeframe by the DARDLEA for achieving food security as per the responsibility of local government, small-scale farmers have seen no progress even after the implementation of the food security programmes. Small-scale farmers opted for a cooperative strategy and formed small business enterprises to help address common challenges by combining their available resources to improve production which enables access to the formal market. There is no formal justification of the failure of the DARDLEA in the formation of cooperatives in rural areas, the study suggested a re-alignment of the local government objectives to improve access to extension support services for emerging farmers because they play a major role in coordination and evaluating food security programmes that intend to group small-scale farmers into cooperatives.

Income generation and employment creation agricultural cooperatives

The underlying motive for the formation of agricultural cooperatives from the municipal official perspective was to create an enabling environment for income generation and to produce nutritious food by emerging farmers. Thus, extension officers pointed out that the municipality uses the cooperative strategy to enhance long-term household food security and income generation. The cooperatives expressed their concern that even though they sell fresh produce, the profit from their sales is not satisfactory, since the sales break-even point (output cost-input cost) remains negative because of the high prices of agricultural inputs such as fertilizers. Agricultural Cooperative B stated:

“We are dependent on cooperatives to generate income, but it is not enough to cover basic needs”.

This is a prevalent problem for many emerging farmers in South Africa, cooperatives made a minimum profit due to the shortage of agricultural inputs. Interestingly, findings revealed that despite the minimal earnings from the sales of production, cooperative businesses created part-time employment for community members in rural areas. Anania and Sambuo (2017) sustained agricultural cooperative businesses or enterprises have emerged as one of the most viable organizations for promoting employment. Agricultural cooperatives attested that even though the type of employment provided by cooperatives is usually part-time and seasonal employment, community members take shifts of at least two days of work per week. The study discovered that the reason why workers had to take shifts was to ensure that each month the cooperative employs different people that are struggling to make ends meet. Agricultural cooperatives have been constrained by limited financial resources to expand their economic impact specifically on sustainable job creation. The study findings proved that the availability of agricultural productive inputs subsidy for fertilizer and seedling is critical for improving agricultural cooperative income. Municipal officials indicated that the program offered by DARDLEA offers technical and infrastructure assistance to land reform beneficiaries such as subsistence food producers, smallholder farmers, and commercial farmers. This is a misconception according to some agricultural cooperatives who argued that they have never received any infrastructural support. On the other hand, Okemu (2016) reveals that since the birth of democracy in South Africa, the development of a strong cooperative sector has been at the forefront of government interventions. Therefore, the success of the cooperative strategy is dependent on the expansion of government support.

Crop production in agricultural cooperatives

Crop production is very prevalent in rural areas, agricultural cooperatives C and E acknowledged that crop production is their primary source of food and income strategy. Crop production has provided agricultural cooperatives in rural areas with fast returns on both income and food production. Agricultural cooperative D indicated that they grew crops for household consumption and trade, including feed grain, and fiber. However, agricultural cooperatives production is limited by resources such as financial capital, agricultural cooperatives do not afford to buy inputs like seeds, fertilizers, and agrochemicals, which increase agricultural productivity. Zakaria et al. (2019) confirm that inadequate financial capital harms agricultural productivity. Thus, many cooperatives produce one to five easily accessible crops such as spinach, beetroot, tomatoes, cabbage, and beans. The findings revealed the necessity of training to equip farmers with appropriate agricultural techniques to improve their farming activities and harvesting. Extension officer B stated that the official:

“Advises cooperatives on how to plant, when and what type of plants [are] suitable for that particular area considering the current climatical conditions in South Africa”.

This study suggested that the food security programme from DARDLEA as an intervention strategy does not sustain the cooperative businesses because it enhances the dependency of crop producers towards support services. Agricultural cooperatives have the potential to provide higher quality fresh produce. However, the underlying conditions, such as the constraint on availability of agricultural inputs and financial resources, affect their ability to produce higher-quality fresh produce, make more income and improve their efficacy in enhancing livelihood outcomes. The inability to reduce this vulnerability is due to farmer's inadequate human capital, such as expertise, education, and training. Henceforth, the

DARDLEA and extension strategic plan are to promote farmer's training through well-managed inter-sectoral collaboration and established education policies to sustain production and the life span of agricultural cooperatives. To address the above-mentioned constraints discouraging cooperative production, this strategic plan will establish farmer's organizations that rely on enhanced human capital, specifically the farmers' training and education offered by extension officials to establish cooperative enterprises through business plans that encourages funding for agricultural inputs. Municipal officials indicated that two programmes are called Phezukwemkhono-mlimi and Masibuyele-esibayeni aimed at encouraging agricultural cooperatives to be viable in the sector.

Phezukwemkhono-Mlimi food security programme

Phezukwemkhono-Mlimi, "Be ready to work farmer," is a flagship program by the municipality to encourage rural communities to become involved in farming and to develop a self-sustaining rural economy. However, this programme has been one of the local projects that were not feasible to address persistent food insecurity at the household level. Although, Extension officer B, pointed out that this program aimed to mobilize and support agricultural crop producers in rural areas to improve food production. This was going to be achieved through addressing challenges such as lack of technical support, poor farming management skills, and a lack of being competitive in the market. The study suggested that an evaluation and monitoring tool must be conducted by the DARDLEA to measure the effectiveness or impact of this food security programme directly from the beneficiaries perspective, this will enable extension officials to devise strategies on how they can extend or plan extension services to meet the requirements of the cooperative producers.

Municipal officials indicated that there is notable progress on the contribution of the agricultural cooperative as a livelihood strategy towards enhanced food security in rural areas since the implementation of this programme, which includes small-scale farmers being able to afford household nutritional needs and improved well-being. In a business model, cooperatives should be able to sustain themselves by being able to minimize environmental impacts such as high consumption of water, investing in the local community through job creation and be financially responsible with or without the intervention of local government. Local government intervention is important in the development of cooperatives because it allows economic and social cohesion of emerging farmers, however, their intervention strategies must establish an exit strategy that will not impact the progress of existing and new cooperatives. The role of extension officers in agricultural cooperatives which is enabling efficiency through technical and advisory support has somehow compromised the business strategy of many cooperatives specifically those that have become dependent on this program. Through the Phezukwemkhono-mlimi programme, the study found that extension officers were facilitators tasked to help farmers in the implementation of appropriate knowledge in production to attain good results concerning sustainable production. As results agricultural cooperative attested, they have received training on how to plant and what kind of crops were suitable for each season, this enabled cooperatives to overlook many other challenges they faced and strived for improved production.

Findings validated that the extension support service from this programme has only encouraged dependency and the inability of agricultural cooperatives to work effectively without government support. As a result, many agricultural cooperatives stated they depend on extension officers for the provision of crops or seedlings which means without extension support services some of the cooperatives will not produce and there will be no income. Sebeho (2017), extension officers' role is to promote the latest agricultural technologies to ensure

sustainable agricultural growth in developing countries. Nonetheless, municipal officials further withstand that the minimal impact made over the past five years this programme aimed to.

- Provide mechanization assistance to poor community households whose land is lying fallow for them to participate in agriculture by tilling their fields/backyards.
- Increasing farm income by growing crops.
- Creating jobs for tractor operators and production and promote other rural industries through agricultural backward and forward links where possible.

This study suggested that the Phezukwemkhono-mlimi and its objectives were not fully implemented and met to improve the status quo cooperatives. Agricultural cooperative E confirmed that through extension support services they are trained to grow fresh produce to achieve the second objective of this programme, however with the effect of Covid-19, production was further reduced, and income was mainly generated from the sales of seedlings that are provided by the food security programme. Municipal officials indicated that the municipality has limited resources, hence this program remains less effective in achieving all their objectives, but they lease production resources such as tractors for ploughing and planting. Even though agricultural cooperatives attested that the program offered agricultural inputs such as seedlings and manure and limited farmer's training, some were satisfied mainly because they were able to meet their cooperative targeted objectives. The impact of this programme is somewhat unsustainable because for a business to grow, it should be able to finance its operations, many government interventions lead to failure because their exit strategy from cooperatives does not open channels for further development and self-reliance. While (Lencucha et al., 2020) argued that increased cooperative business in rural areas is encouraged by government support programs because their interventions allow for the provision of technical services, input, and output resources which result in increased production.

Masibuyele Esibayeni food security programme

Masibuyele Esibayeni, "let us return to the kraal," is the food security programme initiated by DARDLEA to livestock producers in rural areas. The historically disadvantaged group and unemployed youth and elderly people were prioritized as the main beneficiaries. However, findings established that there is a mismatch between what beneficiaries expected from the programme and what the programme could give. For instance, the municipal official indicated that DARDLEA is unable to give livestock to all qualifying beneficiaries because they use a model of lending livestock such as cows, goats, and sheep to emerging cooperative farmers for a start-up which has proven to be unsustainable. The so-called give-back model was used to lend livestock to farmers in rural areas and the expectation was that the first batch of beneficiaries multiply their livestock through more productive and give back surplus livestock to the next set of beneficiaries through this food security programme. Beneficiaries preferred to commercialize the livestock by selling milk, beef as means of income generation. This was only viable until a certain period where farmers failed to feed the livestock due to a lack of financial resources. And poor marketing strategies for their product. Thus, municipal officials indicated that the market for livestock product is open and profitable one because beneficiaries are also able to negotiate their selling price. However, further findings showed that this programme is currently ineffective, the municipality and DARDLEA failed to secure livestock from the give-back model to increase their beneficiary scale.

The study suggested a re-evaluation of the give-back model to assess the failure of this programme. The study concluded assessing the failure of this programme will address issues of

poor monitoring of existing livestock beneficiaries and the inability to maintain the viability of the programme. Shabangu (2015) indicated that the failure of programmes such as Masibuyele esibayeni is also led by poor communication, limited mechanization, insufficient production inputs and a lack of consultation with stakeholders within the agricultural sector. The above-mentioned challenges are common stumbling blocks between agricultural cooperatives and improved production, poor communication instance has negatively affected access to the formal market. Extension officers validated that agricultural cooperative fail to identify and negotiate with stakeholders in the formal market to supply the production. Moreover, lack of production inputs has continued to impede livestock production, thus, Shabangu (2015) confirmed that insufficient production inputs are due to limited budgetary constrain and insufficient funding. Municipal official A revealed that the objectives of the Masibuyele-esibayeni program are as follows:

- To increase the household level of food security focusing on livestock production
- To commercialize livestock production in Mpumalanga province
- To improve the genetic material by a supply of performance-tested animals such as bulls, bucks, rams, and boars.
- To re-introduce the Nguni cattle breeds in communal areas of Mpumalanga province

The program failed to fulfil its objectives because of many constraints including poor monitoring and evaluation of livestock beneficiaries' progress and production. Extension officers A and B stated that this programme has failed in the past five years due to looting of resources and inconsistency in the process of identifying beneficiaries of the programme. Municipal official A indicated that the DARDLEA is currently looking for intervention measures that will address challenges faced by this programme in meeting its objectives. The study suggested that to improve food security and income for livestock producer's government needs to introduce better ways to present the concept of the Masibuyele-esibayeni programme that will add value to the rural areas.

Management of Agricultural Cooperatives in Rural Areas

Agricultural cooperatives indicated that cooperative management is linked to all management functions, including planning, coordinating, encouraging, and managing the flow of financial capital. Agricultural cooperatives confirmed that like any other business they established a board of directors and managers from four to five members of the cooperatives. These are the people responsible for assigning daily duties amongst members according to available resources. To produce effectively resources are equally distributed to members as per the scope of work and members of the cooperative report to the board. Many agricultural cooperatives agreed that they share responsibilities to ensure that all management activities are completed to achieve organizational goals. This involves working together on everyday tasks like hoeing, planting, fertilization, and crop harvesting. However, Extension officers revealed that cooperatives normally face disputes among members as they battle in sharing roles and responsibilities while performing the above duties.

Conflict inside cooperatives usually is fueled by greed and power struggles among cooperative members. Municipal official A further pointed out that conflicts are most common in large agricultural cooperatives with fifty or more members, the larger the cooperative, the more conflicts it is likely to encounter as there are many people to share responsibilities with. Extension officer B pointed out that conflict is important for growth because it allows members

to work on organizational concerns in the most constructive manner. Titov et al. (2018) state that organizational concerns are a common source of conflict, they include sharing of limited resources and their distribution, interdependency, differences in goals and viewpoints, managerial mistakes, unclear status, and communication problems.

The study suggested that to avoid destructive disputes, cooperative members must shape their entity based on a relationship outside of their working context. For instance, extension officer B indicated that family and friend's cooperatives have worked better in resolving conflict with their intervention than agricultural cooperatives that were formed by strangers. This study suggested that because agricultural cooperative management is linked to resource management, to avoid conflict many agricultural cooperatives need to develop more successful and equitable resource management structures and streamline farm operations.

Funding for Agricultural Cooperatives

Municipal official A pointed out that one of the most critical assets needed to promote sustainable farmer growth is access to agricultural funding. Cooperatives are currently faced with considerable difficulties in accessing funding either grants or credit, banks are often reluctant to lend to them due to poor collateral and lack of information (Food and Agriculture Organization, 2015). Lack of funding in cooperative farming causes economic inequalities, such as low income and food insecurity, financial assets such as collateral are essential. Insufficient collateral is just a few of the obstacles that SMEs including agricultural businesses face when seeking bank loans. Peprah (2016) further argued that the reason why banks are hesitant to provide funding is also concerned with poor business proposals, unprofitable investment decisions and unfavourable governmental economic policies. Extension officers stated that the DARDLEA food security programmes provide funding for sustainable farmer development and access to agricultural inputs. Agricultural cooperatives revealed that they are currently not funded by any public agencies which are serving effectively to the idea of a business model because the expectation is that cooperatives as user-owned enterprises must be profitable enough to finance their functions.

Khwidzilli and Worth (2020) affirm that many farmers resort to unsustainable agricultural practices, resulting in a lack of access to either public or private funding for sustainable agriculture. Extension officers indicated that agencies such as the social development department are available for funding of cooperatives, but many cooperatives fail to meet the minimum criteria. Municipal officials indicated that social development grant for farmers is made available and accessible to non-profit organizations, of which majority of agricultural cooperatives in rural areas are privately owned and profit oriented. This analysis confirmed that lack of funding exacerbates local food producer's economic disparities, such as low wages and food insecurity.

5. Conclusion

This study explored the challenges and opportunities based on the perspectives and experiences of agricultural cooperatives, agricultural extension officers, and municipal officials that restrict agricultural cooperatives efficacy in improving food security in rural areas. The study concludes that agricultural cooperatives are essential to add value to enhancing food security, income generation and as a livelihood's strategy. Although they are still constrained by many operative challenges, such as lack of access to agricultural inputs and inadequate institutional support to realize the goals of agricultural cooperatives. Cooperative farmers have partially played significant role in addressing food security related issues in rural setting. Thus,

the study confirmed that there is a potential for the development of cooperative strategies that would enhance livelihoods and advocates self-sufficient.

This calls for effective monitoring and evaluation to ensure efficacy of government initiatives such as Phezukwemkhono-mlimi and Masibuyele-esibayeni to achieve livelihood outcomes. Agricultural cooperative strategies with municipal intervention must be able to demonstrate the benefit of being community-based businesses, cooperatives must train and acquire skills for fundraising to create a sizable base of funds from which they can pull larger amounts of capital for sufficient agricultural inputs. Furthermore, effective, and equitable resource management systems are required to enable farm operations. Cooperatives must comprehend and interact in management functions from the standpoint of agricultural extension officers. The study recommends that agricultural cooperatives should implement a cooperative management structure for a strategic leadership that would enhance their planning, coordination, and monitoring of their agricultural cooperatives. The study put emphasis that agricultural extension officers should establish co-effective partnerships with agricultural input distributors to ensure availability of agricultural inputs. Therefore, this calls for local government institutions such as municipalities re-evaluate agricultural cooperative governance frameworks through agencies that could assist policymakers in designing and implementation policies and regulations to achieve enabling environments for farming activities.

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