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Management and Sustainability of Small-Scale Agricultural Projects: A Case of Elias Motsoaledi Local Municipality, Limpopo Province, South Africa

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Abstract

Agriculture can be a tool in uplifting the livelihoods of rural communities. Thus, agricultural projects can play a pivotal role in the advancement of people living in rural areas. The sustainability of agricultural projects through effective management results in achieving rural development. However, small scale or emerging farmers face a myriad of challenges in their farming activities, and this negatively impacts the success of their projects. The study investigated the factors that limit the effective management and sustainability of agricultural projects in a selected local municipality of the Limpopo Province, South Africa. The findings show that participants' education levels contribute to the effective (or lack thereof) management of the projects. The type of crops or agriculture projects one pursues determines the income generated and the sustainability of the project. The study recommends the up skilling of the beneficiaries of such projects which include financial management training. Further, a different funding model is needed for the benefit of both the government and the small-scale and sustenance farmers.

Keywords: Agriculture, small-scale farming, project management, sustainability

1 INTRODUCTION AND BACKGROUND

Dercon and Gollin (2014:473) are of the view that agriculture is a driving force behind rural development, which is marked by activities and actions of many players, individuals, organisations, and groups that, when combined, result in advancement in rural regions. However, small-scale farmers are those that cultivate one or more commercial crops on one or more small parcels of land while largely utilising family labour (Department of Agriculture, Forestry and Fisheries, 2012). The Reconstruction Development Plan (RDP) of 1994, Growth, Employment and Redistribution (GEAR) of 1996, Accelerated and Shared Growth of South Africa (AsgiSA) of 2006, National Growth Path (NGP) of 2010 and the National Development Plan (NDP) of 2012 are just a few of the planning tools and policies that South Africa as a Developmental State has adopted since 1994 (Thompson and Wissink, 2018; Fourie, 2019). The key objectives have been to increase the power of formerly marginalised communities, guarantee sustainable job creation, reduce poverty, and correct historical inequalities (Damoah, Akweik, and Mouzig, 2015:17). The National Development Plan (NDP), Vision 2030, was established and released as a result of the President's appointment of the National Planning Commission in May 2010 in 2010 (National Planning Commission, 2012:34).

Even though the agricultural sector may be the primary focus of a project's success, other contributing variables including institutional efficacy, management and human resource capability have shown to be just as crucial in realising those plans' goals (Gwangwa, 2010:7). Misselhorn and Hendriks (2017:39) argue that agriculture is the industry that has the greatest potential to alter rural economies. Agribusinesses make a significant contribution to rural communities' economic development and food security.

According to Ncube and Kang'ethe, (2015:295) poor income, poor savings, low investment and low capital development are the most common characteristics of South African rural communities. These defects adversely affect agricultural production, which in turn affects people's means of subsistence. Dercon and Gollin (2014:473) state that agriculture is a driving force behind rural development, which is distinguished by activities and actions of many players, individuals, organisations, and organisations that when combined result in advancement in rural areas.

Even though numerous food security projects have been launched and received significant funding from a variety of sectors, including the Department of Agriculture, the Department of Social Development, the Department of Rural Development and Land Reform, as well as other significant funders within the study area, many of those projects have fallen short of the intended developmental goals. The management of those initiatives is to blame for this (Sekhukhune District Rural Development Plan, 2016). According to Mbatha (2019:2) rural communities are typically at a disadvantage in agricultural production and management due to their lack of resources and expertise. Agriculture is undoubtedly vital for the food supply and income of rural households, but it is only one business in a varied range of livelihoods that compete with other ways to make a living (Giller et., 2021).

The study focused on one local municipality: Elias Motsoaledi Local Municipality within the Sekhukhune District Municipality. Intensive agricultural activities (under 5 irrigation schemes) cover a total land surface area of 28 800 ha. The agricultural produce includes grapes, wheat, tobacco, maize, soya beans, citrus fruits, cotton and vegetables (IDP, 2021/22-2025/26). The Elias Motsoaledi local municipality consists of 157 villages and 31 wards with an estimated population of 268 256 persons in 2023 (Elias Motsoaledi Local Municipality IDP, 2023/2024).

2 WHY IS AGRICULTURE AN IMPORTANT SECTOR?

The most important sector that may improve rural economies is agriculture. The agribusiness, as said by Pfunzo (2017), contributes immensely to economic growth and food security. In addition, utilising agriculture's potential will probably lead to a change in the rural economy (Sekhukhune District Municipality, 2016:12). The New Growth Path (NGP) and the National Development Plan (NDP), two of South Africa's most important programmes, promote agriculture to foster inclusive growth, employment, and food security (Geza, Ngidi, Slotow, and Mabhaudhi, 2022).

In order to attain broader social security coverage, Hendriks (2014:18) claims that "the National Development Plan proposes a commitment to household food and nutrition security involving both public and private sector action." The Plan states that a household's ability to obtain food defines its level of food security. As a result, it's crucial to enhance agricultural output, create jobs, and help low-income families manage rising food prices. According to Hendricks (2014), agriculture not only provides food but also supports rural livelihoods and generates jobs along the supply chain. The success and sustainability of the local agricultural projects therefore becomes much more crucial. Agriculture can quickly generate more jobs, especially in rural areas where traditional industries are not encouraged to establish operations, where it now provides 5% of all employment in SA (World Bank, 2021).

3 REVOLUTIONISED AGRICULTURAL SECTOR

According to Wu, Jin and Zhao (2010:798) China's agricultural sector has revolutionised significantly since the end of communism. Additionally, in the new era of reform (capitalism), agriculture in rural areas has been dominated by smallholdings of groups of people, known as agricultural projects in various parts of the world. Agriculture has not only expanded food production during the reform era, but China has also turned into a net agricultural exporter of food. Productivity rose dramatically as a result of the de-collectivization movement's increased incentives and improved property rights.

According to Scoones et al. (2016), China's rural agriculture has adopted the strategy of community-based agricultural cooperative initiatives. As a result, China is rapidly transitioning away from crop-based agriculture. The growth of the livestock and fishing industries surpassed that of crops in general and most of its subcategories. There has been a noticeable change in managerial techniques. The management of the agricultural projects is oriented on the needs of the people, and the government offers training in this area (Zhang et al., 2016).

Nearly half of Kenya's 500,000 square km territory in East Africa is dedicated to agriculture. One of the best agricultural production zones in Africa is the Kenyan Highlands. Kenya has implemented important structural and economic reforms in the agriculture sector recently, which have helped the country experience social and economic development (Walingo, 2006:289). In Kenya, agriculture is the cornerstone of economic development and poverty eradication. It is essential for generating jobs, ensuring food security, earning foreign exchange, and promoting environmental sustainability. Agriculture's expansion and growth are closely tied to the growth of the

national economy, which in 2017 contributed 31 percent of GDP. In the absence of other sources of livelihood security, smallholder farms will continue to be a significant source of food and income as well as a social safety net (Giller et al., 2021).

4 SUSTAINABILITY OF SMALL-SCALE AGRICULTURAL PROJECTS

One of the biggest problems facing all local, national, and international development organisations is project sustainability (Oino et al., 2015: 759). The idea of sustainability may be understood in the context of changing social, economic, and political circumstances over time (Ababa, 2013:44). According to Ceptureanu et al. (2018:870) sustainability is reflected in the community's ability to deal with change and adapt to novel circumstances. Once its initial financing base expires, the typical community-based initiative frequently has a relatively short lifespan (Kataka, 2017:81).

In South Africa, agriculture is a key driver of economic growth, therefore land reform initiatives should focus on implementing agricultural projects to open up new economic prospects. According to Chikazunga and Paradza (2012:4) and the National Planning Commission (2011:195), agriculture is essential to the development of rural areas. Small-scale farming contributes to the rural economy and produces jobs in rural areas. Rural development is greatly aided by agriculture since it offers a wide range of chances for secondary sectors that are dependent on agricultural produce.

The efforts to build an inclusive agricultural sector through the upliftment of black farmers by the new democratic government since 1994 have failed, argues Sihlobo and Qobo (2021). Chikazunga and Paradza (2012:2) believe there is no strong support system available to support farmers in groups such as cooperatives and projects, especially in rural areas. This has resulted in such agricultural projects unable to take advantage of the various opportunities that the government as well as other non-governmental entities have been instituting.

Hendriks and Olivier (2015:559) point out that the government concedes that many of these agricultural programmes have not produced the desired results. Little attention has been paid to the government's initiatives (projects and substance) for new farmers. Thus, it may be claimed that smallholder farmers have a lot of unrealized potential. In brief, Hendrik and Olivier (2015) conclude that, "smallholder agriculture is simply too important to employment, human welfare, and political stability in sub-Saharan Africa to be ignored".

Mathinya, Franke, Van De Ven and Giller (2022) assert that most South Africa's tiny farming settlements are in the country's eastern regions, in what were formerly known as homelands, in the summer rainfall bioregion. The subtropical region where most of the summer rainfall occurs has a temperate, semiarid environment with unpredictable rainfall. Myeni, Moeletsi and Thavhani (2019:3004) note that, three million South African households practise subsistence farming; smallholder farmers, which include cooperatives and agricultural initiatives, total roughly 250 000. The policy community pays little attention to either group. Since smallholder production improves the amount of food available to households, there is a critical need to raise the productivity of smallholder farmers in order to secure long-term food security.

5 EMPIRICAL FINDINGS AND DISCUSSION

This section outlines the findings, interpretation and analysis based on the empirical data collected. The results are evaluated considering the study's goals and the body of existing literature. Understanding the constraints limiting the efficient management and sustainability of small-scale agricultural initiatives in the Sekhukhune District of the Limpopo Province was the study's main objective. Following a tabular presentation of the participant demographics, semi-structured interview transcripts are offered.

A total of eighteen (18) participants were part of the study. The demographic characteristics looked at variables such as age, gender, and formal education levels. These variables were included because they influence one's participation and level of participation in the agricultural projects.

Table 1: Participants Demographics

Demographic characteristics	Frequency	Percentage (%)
Age (Years)		
19 – 30	1	6
31 - 40	2	11
41 – 50	10	56
51 – 60	5	27
Total	18	100
Gender Male	7	39

Female	11	61
Total	18	100
Education		
- Primary School	11	61
- High school grade 12 complete	1	6
- High school grade 12 incomplete	4	23
- Undergraduate	1	5
- Postgraduate	1	5
- Total	18	100

Source: Author's own

Table 1 above shows that most participants were within the range of 41 – 50 years of age with a combined total of fifteen. Only three participants were in the range of 19 – 40 years of age. Cheteni (2016:207) noted that the majority of the youth have migrated from rural to urban areas to look for employment instead of partaking in agricultural activities. In support, Mujuru and Obi (2020) observed that the youth do not favour agricultural projects since farming needs patience and takes a longer time for financial gains to be yielded.

With eleven women and seven males, there were more women than men among the participants. In a different study, Agarwal (2018:26) discovered that women produce 60–80% of the food in underdeveloped nations like South Africa. Similarly. In this survey, we also discovered that more women oversee family leadership since more males are moving to urban areas in quest of typically formal jobs.

Table 1 reveals that eleven participants only completed primary school, which has an impact on the management and sustainability of the agricultural projects, which is further discussed in the section. Four study participants did not complete Grade 12 despite attending high school, while only one had completed Grade 12. Only two of the participants held post-secondary degrees, an undergraduate and a postgraduate, respectively. The two participants who have higher education credentials are municipal officials, therefore none of the beneficiaries of the agriculture project have credentials above a high school diploma.

Due to historical inequities and a lack of educational resources in rural and township communities, education levels in these areas are low. The study's findings are consistent with the general hypothesis that administrators' and managers' lack of training in project management contributes to the failure of agricultural projects to some extent. One may argue that a lack of education is crucial to the management and sustainability of agricultural initiatives. Failure of agricultural projects is therefore primarily linked to management's lack of knowledge and expertise.

5.1 Types of Agricultural Projects in the Area

The research participants carry out a variety of agricultural projects, the majority of which are crop-based. Plants like maize and sorghum are grown during the rainy season, whereas the bulk of vegetables are cultivated all year round due to the unpredictable rainfall and water supplies.

The largest of the projects is agriculture, which includes year-round production of butternuts, potatoes, and cabbage. During the wet season, sorghum and maize are planted. According to Matiwane and Terblanche (2017:29), these initiatives are easy community markets that are typically developed by small-scale farmers since the financial benefits are felt right away. Mahlombe (2018:77) agrees that cropping and animal production are both necessary for the market and food security, thus crops farmed for both purposes are beneficial.

5.2 Challenges to Effective Management and Sustainability in the Study

Social

The management of agricultural projects has been considered as being negatively impacted by social considerations. The study discovered that localised poverty precedes the implementation of agricultural programmes. It was discovered that the research region is a rural area with a significant level of poverty. Also prevalent is food insecurity. Considering this, agricultural initiatives are developed on the premise that they are food gardens intended more for humanitarian causes than for profit. As a result, agricultural output is not viewed as sustainable but rather as a means of supplying the population's immediate demands for food. Some of the study participants were of the view that;

“The need for constant supply of food has led us to partake in this agricultural project as the produce is vital for food at the end of the day. The crops are mainly for our consumption rather than selling. We divide the produce at harvest and share amongst ourselves mainly for consumption” (Participant 1)

“The agricultural projects act as a food and livestock centre but also help us to meet as community members for socialisation. The projects help us to alleviate poverty since the little money we make help us to put food on the table” (Participant 3)

These sentiments are shared by Nesengani, Mudau and Netshandama (2015:117) who argued that social variables such as food inequality drive people to agricultural initiatives, which has an impact on their profitability and sustainability. According to Molelu (2015:61), societal variables like poverty trump the viability of garden programmes because they are viewed as a means of ensuring food security.

Funding

Financial restrictions have significantly impacted project management. This has an effect on the projects' sustainability as well. The study area's agricultural projects have few or no funding sources. Sales revenue is the most stable and predictable source of funding for them, though occasionally the government will contribute. They have received funding from the Departments of Social Development, Rural Development and Land Reform and Department of Agriculture Forestry and Fisheries in that order of frequency.

“Contributions we make from our pockets to fund the agricultural production makes the bulk of the funding. Funding from businesses is sporadic and we cannot plan our activities based on that” (Participant 6).

“The government support to us financially is very limited so is the private sector. We rely heavily on the donations which we make ourselves” (Participant 4).

This leads to the conclusion that finance is low for agricultural initiatives, which has a significant impact on their management and sustainability because support should be provided until capacity is unquestionably created to assure self-sustainability. According to Ajani, Mgbenka, and Onah (2015:37), the viability of agricultural programmes is hampered by a lack of funding. Hlungwani (2018:79) agrees that funding disparities in agricultural projects intended to generate income impede development.

Effective management of agricultural initiatives in the research area is seriously hampered by financial capacity. The study's findings showed that there are no reliable financial resources that are crucial for obtaining the agricultural production inputs that are needed. These inputs include mechanical tools, fertilisers, insecticides, seeds, and seedlings. The study discovered that the local agricultural projects fall short of requirements for financial institutions' funding, including audited financial statements, property ownership for collateral purposes, and evidence of land ownership. The participants of the study stated that,

“We have tried to approach financial institutions to purchase relevant inputs in our agricultural projects but we could not meet the criteria as we do not have the required documentation such as company registration amongst many other requirements. We also tried to apply at the National Lotteries Commission but got rejected because of lack of audited financial statements” (Participant 7)

The above sentiments highlight the fact that funding for agricultural projects remains a challenge and this impacts negatively on their sustainability.

State Departments Support

Participants emphasised that they do not receive the assistance from government agencies that they feel are necessary for their expansion and sustainability. The investigation discovered that although the participants had requested farmland, it had not yet been assigned to them and the procedure was laborious. Since the projects currently occupy a tiny amount of land, they are unable to increase their agricultural output.

The Department of Water and Sanitation plays a significant role in agricultural projects in South Africa since they are the custodians of water sources such as dams, underground and surface water. The Department of Water and Sanitation is required to help ensure that there is enough water allocation for commercial and food security objectives because the study area's climate is typically semi-arid. The one project administrator who was interviewed stated that,

“An assessment was done on our water capacity needs many years ago and we are still waiting for the drilling of the borehole. We only heard that there are budgetary constraints, but corruption has overtaken events where the money was taken away by corrupt officials” (Participant 5).

The participants feel they should be included in the Department of Agriculture since their agricultural company fits within the purview of this industry. The Department oversees providing technical help through agricultural extension officers as well as support in terms of materials. They only get irregular agricultural extension services, which is the only service they get. Typically, three times every year, the agricultural extension officers make visits and provide crop production recommendations. They do not, however, receive any business-related input, particularly regarding management or ways to grow their activities. One participant explained,

“The Department of Agriculture which we believe we fall under is not clear on their services. We thought we will be able to get funding to expand our production but that is not what we get. We are told to apply for funding from other entities such as the National Lotteries Commission or the Department of Trade and Industry, but it is very difficult, and the process is complex. We thought that probably maybe as the custodian of our services they will be able to fund us and provide inputs such as seeds and fertilizers” (Participant 6).

The agricultural ventures are left without the crucial supplies and funding they require to increase their output and move towards sustainability. Kucher (2018:136) states that the expansion and sustainability of small-scale farmers are hampered by a lack of institutional support.

Management of the Agricultural Projects

The study found that there is a lack of management of agricultural projects, and the administrator and manager make most of the decisions. Planning and resource mobilisation are management abilities that are hardly ever used. The analysis discovered that there is absolutely no documentation of how the monies are managed. Income and expenses are not accurately recorded. Above all, there is no financial auditing. The administration of human resources is likewise inconsistent. The study found that work is distributed arbitrarily and without any expertise inside agricultural programmes. Some of the participants highlighted that,

“An autocratic regime is here at the project and there is no information given whatsoever by the management of the project. Decisions are just taken by a few individuals without consulting most of the members. There is no democratic process in the management of the project” (Participant 5).

“We use the basic traditional methods of financial management, and we were never trained for that. Financial principles are non-existent since we do not have the know-how. We were promised training by the state department but up to now nothing was done. So, we just continue doing what we know” (Participant 12).

The managers of the initiatives are usually held accountable when they fail, and individuals who benefited from them are likely to go back into poverty. Poor people are primarily impacted by unsustainable initiatives, and poverty grows rampant in certain places. The results of this study demonstrated that management adopts an authoritarian style of leadership in which they are closed to any input from the other project beneficiaries. The participants of the research pointed out that,

“The decisions regarding the agricultural projects are done in secrecy. They are not informed of what is happening or allowed to give any inputs. We are not even informed about the funding or donations which are received. It’s just we get on with our activities without any information on what is going on” (Participant 8).

Participants in the survey highlighted the fact that management practises inside agricultural projects influence their sustainability in the statement above. The opinions of the other members are not at all considered. This leadership style frequently encourages antagonism, violence, or stifles initiative.

6 Concluding remarks

The study concludes that agricultural projects management and sustainability remains difficult due to a variety of factors, including but not limited to level of education among the beneficiaries, relying on traditional farming methods, lack of project management skills which all have an impact on the management and sustainability of agricultural projects. Furthermore, government agencies that are responsible for assisting small-scale farmers are not doing so in any form, be it materially, technically, or financially. It is advised that project managers as well as participants in the project receive training in fundamental management and financial abilities. Furthermore, to prevent the misuse of public funds, government agencies that help through financial, material, and technical help set up monitoring systems.

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