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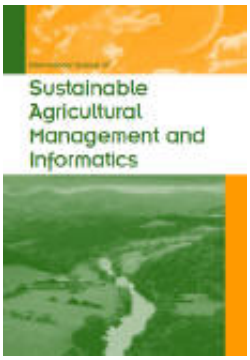

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Government grants towards sustainability of agribusiness in local economic development

Margaret Katlego Makunyane, Marinda Pretorius, Marius Venter, Chané De Bruyn, Andrzej Sztando

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Government grants towards sustainability of agribusiness in local economic development

Margaret Katlego Makunyane

Centre for Local Economic Development (CENLED),
School of Economics,
College of Business and Economics,
University of Johannesburg,
Johannesburg 2006, South Africa
Email: mmkmakunyane@icloud.com

Marinda Pretorius

School of Economics,
College of Business and Economics,
University of Johannesburg,
Johannesburg 2006, South Africa
Email: marindap@uj.ac.za

Marius Venter

Centre for Local Economic Development (CENLED),
School of Economics, College of Business and Economics,
University of Johannesburg,
Johannesburg 2006, South Africa
and
University of Extremadura,
Badajoz, 06006, Spain
Email: mventer@uj.ac.za

Chané de Bruyn*

Centre for Local Economic Development (CENLED),
School of Economics,
College of Business and Economics,
University of Johannesburg,
Johannesburg 2006, South Africa
Email: chanedb@uj.ac.za
*Corresponding author

Andrzej Sztando

Department of Spatial Economy and Self-Governed Administration,
Wroclaw University of Economics and Business,
Komandorska 118/120, 53-345 Wrocław, Poland
Email: andrzej.sztando@ue.wroc.pl

Abstract: In South Africa, agriculture plays a critical role in promoting local economic development (LED). As a result, the South African government introduced grants to support agribusinesses to enhance growth and sustainable operations. Despite government grant support, agribusinesses are facing difficulties that lead to failure and unsustainability. For this reason, this study investigated how government incentives affect the long-term viability of agribusinesses in the Limpopo Province's Waterberg District Municipality. A cross-sectional quantitative survey was conducted using a structured closed-ended questionnaire, and 101 respondents were interviewed. An analysis using SPSS was done using descriptive and inferential statistics to determine the impact of government grants on the operations of agribusinesses. The analysis was also used to identify the challenges agribusiness encountered that hinder sustainability. The results revealed that government grants contribute positively to the sustainability of agribusinesses in the Waterberg District Municipality; however, the support has created dependence. It was also found that respondents face several challenges, causing their businesses to operate at a loss and forcing them to step out of business. Various policy and investment recommendations are made.

Keywords: government grants; sustainability; agribusiness; local economic development; LED; South Africa.

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Biographical notes: Margaret Katlego Makunyane is a Master's student at the University of Johannesburg. She is conducting her Master's within the Centre for Local Economic Development with a focus on agriculture within local economic development.

Marinda Pretorius is an Associate Professor in the School of Economics at the University of Johannesburg and holds a PhD in Finance. Her research covers a range of economic fields, including subjective well-being, sovereign credit ratings, and forecasting methods for macroeconomic variables. Her current research focuses on measuring environmental climate vulnerability and addressing contemporary local economic development challenges. She has published extensively in both national and international journals.

Marius Venter is the Director of the Centre for Local Economic Development (CENLED) at UJ responsible for creating a new career path in local economic development (LED) and successfully completed projects worth 80 million rand to date in LED and entrepreneurship. Achievements include setting up a professional body (EDCSA), the development of 20 short learning programmes, accredited internationally by the International Economic Development Council (IEDC), Master's and PhD in Local Economic Development. He is also the Director of PASCAL Africa, undertaking research in various topics related to LED.

Chané de Bruyn is a researcher in the Centre for Local Economic Development (CENLED) at the University of Johannesburg. She has a PhD in Economics, with a focus on Local Economic Development (LED). She is also certified by the Economic Development Council of South Africa as an Economic Developer in the field of Local Economic Development. In addition, she is a member of the policy maker hub – Future Finance Law Hub. She has published numerous peer-reviewed articles, ranging across quantitative, qualitative and mixed method approaches in international and national journals as well as at conference proceedings and book chapters. Her research focus is centred on topics relating to local economic development, development economics, sustainable development, and tourism development.

Andrzej Sztando is a Professor of Public Management at the Wrocław University of Economics and Business, Poland. He conducts research on local development strategic governance. As a Guest Lecturer, he teaches these issues at various universities around the world, including showing how stimulating local development by municipalities affects the rapid, resilient and sustainable development of Poland. What he do in science, he put into practice. Since 1994, he has been building and implementing local development strategies with Polish and other CEE local authorities and training them in this area. Moreover, He works for international institutions implementing R&D projects in the field of public management, including European Research Executive Agency (managing Horizon Europe research program) and Polish National Center for Research and Development.

1 Introduction

According to the World Bank (2024), approximately 75% of the world's poor live in rural areas, and increasing agricultural production is crucial for reducing poverty. As a result, agriculture remains one of the most important drivers of local economic development (LED) across the world, even in countries where the economic relevance of agriculture has been reduced (Funmilayo et al., 2022). This is because, aside from ensuring food supply, agriculture can promote environmental benefits, create jobs and lead to spillover effects in other industries. CoGTA (2018) defines LED as a collaborative process that involves all local stakeholders, including the government, businesses, public sector organisations, non-governmental sector, and community working together to create an environment that fosters inclusive and innovative economic development. In South Africa, LED is mainly promoted and implemented as a direct local government directive to improve cooperation, governance and collaboration between the government, private sector, and local communities (Meyer, 2014).

In 2022, the agricultural sector constituted over 19% of total employment in South Africa (Trading Economics, 2024), highlighting its continued importance. A significant proportion of farmers operate on a small scale, often supplying local vendors and markets. While this activity contributes to small and medium enterprise development, the survival rate of smallholdings remains low, especially in the Waterberg District Municipality in Limpopo Province, the focus area of this study. To support smallholder sustainability and promote inclusive agricultural growth, the South African government provides grant funding through various programmes (DAFF, 2014). Nonetheless, as Msomi and Zenda (2024) note, these interventions have largely been ineffective. The

growing insolvency of small-scale agricultural enterprises, despite ongoing public sector support, points to deeper structural obstacles that inhibit their long-term sustainability (Aliber and Hall, 2012; Msomi and Zenda, 2024).

Several studies, including those by Baloyi (2010), Panasyuk et al. (2014), Zantsi et al. (2021), Bushe (2019) and Bellmann (2019) have examined government grants and agribusiness development, highlighting implementation challenges and recommending policy reforms. However, few have directly evaluated whether government grant support enhances smallholder sustainability in practice. The reasons why many smallholders continue to fail, even when supported, remain insufficiently explained. Literature further supports the claim that it is yet unknown what influence and effectiveness government grants and subsidies have on local areas (Wang et al., 2019).

This gap raises a critical question: To what extent do government grants influence the sustainability of smallholder farmers operating within an LED context? Motivated by this gap, the study evaluates the real-world impact of government grants on smallholder outcomes, with the aim of informing more targeted and effective support strategies.

Using the Waterberg District Municipality as a case study, the research investigates the factors behind smallholder success, failure, diversification, and exit from the sector. By providing a nuanced understanding of government grant impacts, the study aims to contribute to the design of more context-specific, sustainable, and effective support mechanisms for smallholder agribusinesses in South Africa.

2 Literature review

The agricultural industry of South Africa is characterised by both commercial and smallholding farms. Smallholding farmers are usually characterised as subsistence farmers with small profit margins, and as studies by Zantsi et al. (2021) and Msomi and Zenda (2024) surmise, their low productivity is mostly caused by their reliance on labour-intensive manual labour and traditional production methods, as well as a lack of access to new technologies. Smallholder agriculture may provide an even greater contribution to inclusive growth and job creation, particularly if it is well-integrated into agrifood value chains and a diversified rural economy (Fan and Rue, 2020). Despite often being overlooked in its importance, especially in developing countries, smallholdings play a critical role in development. As Rapsomanikis (2016) expresses, not only do smallholdings grow the majority of the food, but their spending habits can also successfully support rural development. In addition, Ndlovu and Makgetla (2017) write that smallholder farmers play a crucial role in the agricultural industry, where these farmers and their contributions are mostly acknowledged for the jobs and economic empowerment they generate. Any local economy's core is its agriculture sector (Radley, 2017). Smallholder farmers must continue to expand and thrive in order to draw in investors and maintain business operations. The agricultural industry is valued for its resilience in generating positive effects on livelihoods and LED in not only South Africa but across the world as well (FAO, 2015).

Despite their significance, smallholders face substantial and persistent challenges that undermine their sustainability and growth. Even though smallholder farms are essential to ensuring global food security and nutrition, development policies frequently overlook this disadvantaged minority. Rapsomanikis (2015) states that there are many major obstacles that smallholders must overcome, and these obstacles are becoming increasingly severe

as changes occur in the food markets and in agricultural innovation. In addition, these obstacles can weaken the inherent connection between smallholder agriculture and development in local regions. A study by Fan and Rue (2020) explains how smallholders are particularly susceptible to a range of shocks and challenges relating to market prices, financial shocks, health and climate change. Sebola (2018) further adds that in South Africa, especially, smallholders are challenged by a lack of market access, extension services, low profitability and low business skills. Despite these constraints, smallholder farmers remain vital to sustainability, food security and poverty reduction. Studies such as Newton et al. (2020) and Msomi and Zenda (2024) surmise that smallholders contribute to a more inclusive agricultural industry by supporting the participation of women, youth and persons with disabilities.

Recent international research has expanded the understanding of smallholder sustainability by highlighting key enabling and limiting factors. Chandio et al. (2021) demonstrate that factors such as education, extension services, landholding size and road access significantly influence credit demand, a crucial determinant of farmers' ability to invest in productivity-enhancing inputs and technologies. Nguyen et al. (2024) add that smallholders' willingness to adopt more sustainable and efficient practices depends not only on perceived usefulness and ease of use, but also on government support and the presence of effective agricultural cooperatives. This reinforces the importance of linking grant provision with local capacity-building and cooperative support.

Pham et al. (2024) further reveal that household characteristics such as education, income diversity, and remittances explain much of the consumption inequality between farm and non-farm households. This suggests that diversified income sources and human capital are key to the resilience and sustainability of farming households. Meanwhile, Ryba (2025) argues that the success of agricultural support policies hinges not only on the support itself but on how well they align with local economic realities, such as input cost structures and market access. Collectively, these studies underscore the importance of designing context-sensitive, evidence-based grant systems that address the structural and behavioural constraints rather than offering uniform financial support.

However, despite various support measures, the sustainability of smallholders in South Africa continues to decline. Nelson (2019) observes that many struggle to maintain business operations. As is known, the foundation of any company's sustainability is consistency and survival. In accordance with Radley (2017) and DAFF (2018), when businesses, including smallholders, are sustainable, they can contribute to employment creation, poverty reduction and food security. Therefore, the survival of smallholders is key to promoting sustainable LED. The South African government has implemented various frameworks, financial systems, and regulations to assist smallholder farmers, yet these have not yielded the desired outcomes.

A major concern in South Africa is the persistent increase in smallholder failure rates, even among those with business plans and funding (Seeletse, 2012). Despite significant financial allocations and support systems by the South African government, the smallholder agriculture industry as a whole has seen limited growth (Zantsi et al., 2021; Msomi and Zenda, 2024). Failure and unsustainability persist, and Freguin-Gresh et al. (2012) found no compelling evidence of long-term success among supported smallholders. Additionally, several studies, such as Panasyuk et al. (2014), Bellmann (2019) and Zantsi et al. (2021), investigate the role of government grants in agribusinesses. Others, such as Baloyi (2010) and Bushe (2019), explore the challenges facing smallholders and suggest ways to improve support mechanisms. Msomi and Zenda

(2024) identify access to microloans as one of the most pressing challenges facing smallholders in Gauteng Province.

However, despite these contributions, a clear explanation remains lacking as to why smallholders continue to fail even with government support. Furthermore, many of the studies do not directly evaluate the impact of government grants on sustainability. Wang et al. (2019) support this view, arguing that the effectiveness of such grants remains uncertain, Aliber and Hall (2012) further note that understanding what impedes smallholder sustainability is paramount for ensuring their successful contribution to LED. For this reason, this study aims to examine the impact of local South African government grants on the sustainability of smallholders in an LED context, with a focus on the Waterberg District Municipality.

3 Methodology

The study adopted a cross-sectional quantitative research design to investigate the influence of government grants on the sustainability of smallholder farmers in the Waterberg District Municipality. Primary data were collected using a structured, closed-ended questionnaire, which was administered to smallholder farmers who had received government assistance. This cross-sectional approach is appropriate for collecting data at a single point in time to assess the current impact of grants on agribusiness operations [Saunders et al., (2012), p.155]. A total of 135 questionnaires were distributed, and 101 valid responses were obtained. These participants were involved in various types of agricultural production, including crop, livestock and poultry farming, and were all located within the five local municipalities of the Waterberg District: Thabazimbi, Mogalakwena, Bela-Bela, Modimolle-Mookgopong and Lephalale.

The questionnaire consisted primarily of Likert-scale items and other closed-ended questions focusing on:

- the type and nature of grant support received
- the role of such support in the production cycle
- the perceived impact on sustainability, profitability, and long-term operations.

To ensure clarity and reliability, a pilot test was conducted with 15 smallholder farmers to refine the questionnaire and confirm the comprehensibility of the items. The responses from the main survey were analysed using SPSS. Descriptive statistics were used to summarise trends in the data, while inferential statistics, including correlation analysis, were applied to determine the relationships between grant support and sustainability outcomes.

Ethical clearance for the study was obtained from the University of Johannesburg's College of Business and Economics Research Ethics Committee prior to data collection. Participation in the study was voluntary, and informed consent was obtained from all respondents. The data was collected anonymously, and all ethical protocols regarding confidentiality and responsible research conduct were followed.

4 Results and discussion

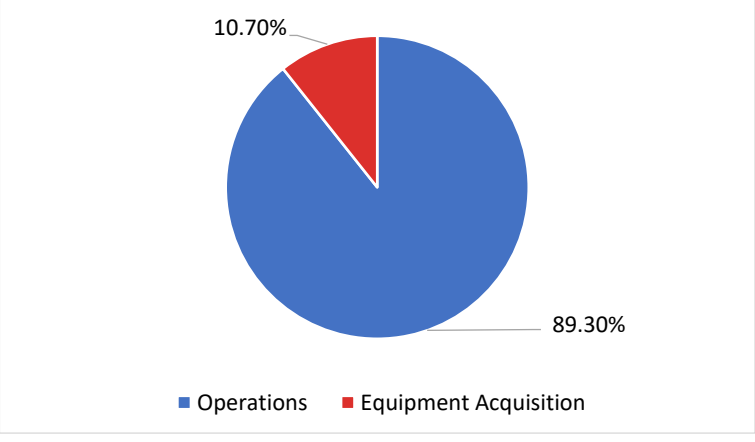
The following section presents the results. Several kinds of subsidies are funded by government initiatives, where various types of grants are given to smallholder farmers. The majority of the support was received in the form of implements to use on the farm. The respondents were questioned about why they were applying for funding. While many welcomed the support, some expressed dissatisfaction with its structure, noting that assistance is sometimes received without request, leading to inefficiencies and waste. Table 1 illustrates the primary types of support requested by smallholders.

Table 1 Funding required by the smallholders

Item	*Responses*	
	N	*Percent*
Cash	10	7.4%
Production inputs	79	58.5%
Equipment	27	20.0%
Infrastructure	19	14.1%
Total	135	100.0%

According to Table 1, 58.5% of respondents stated financing was given for the purchase of intermediate demand items such as machinery and raw materials, 20% for equipment, and 14.1% for infrastructure renovations. This supports the argument by Chandio et al. (2021) that access to implements and production tools is a major determinant of farm-level investment behaviour and productivity. Since inputs are needed for every stage of the production cycle, smallholder farmers most frequently request funding for production inputs. Figure 1 provides further detail on the purpose of funding use.

Figure 1 The purpose of funding required (see online version for colours)



According to Figure 1, 89.3% of respondents used grants for operational needs, while only 10.7% used them for purchasing machinery and equipment. This reflects the dependence of smallholder farmers on external financial support to maintain day-to-day

activities and confirms the findings of Nguyen et al. (2024), who highlight that farmers often allocate grants to immediate operational sustainability rather than long-term capital investment

The importance of grants in initiating the production cycles was emphasised across the sample. According to Aliber (2019), farmers who were previously given assistance will always anticipate government support for their output. Mtombeni et al. (2019) argue that long-term dependence on subsidies without an exit strategy can undermine sustainability, which echoes the sentiments of this study's respondents. Figure 2 reflects the perceived impact of government support on sustainability.

Figure 2 Sustainability and government funding (see online version for colours)

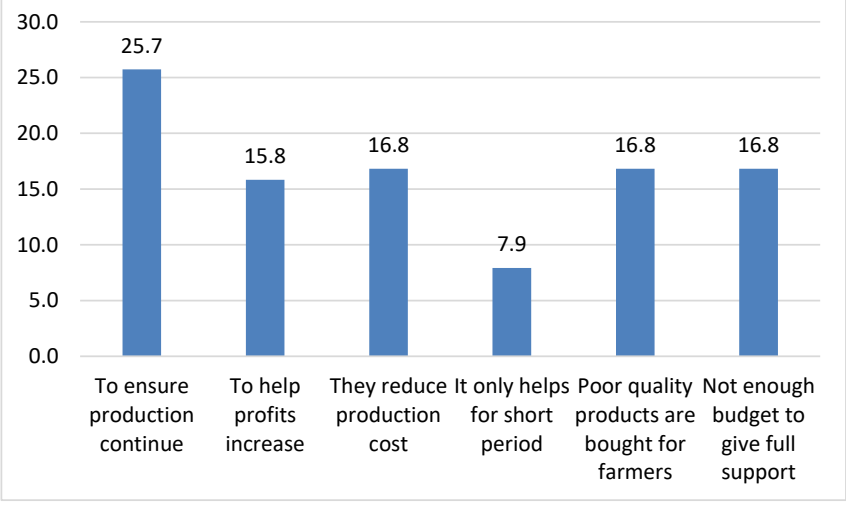
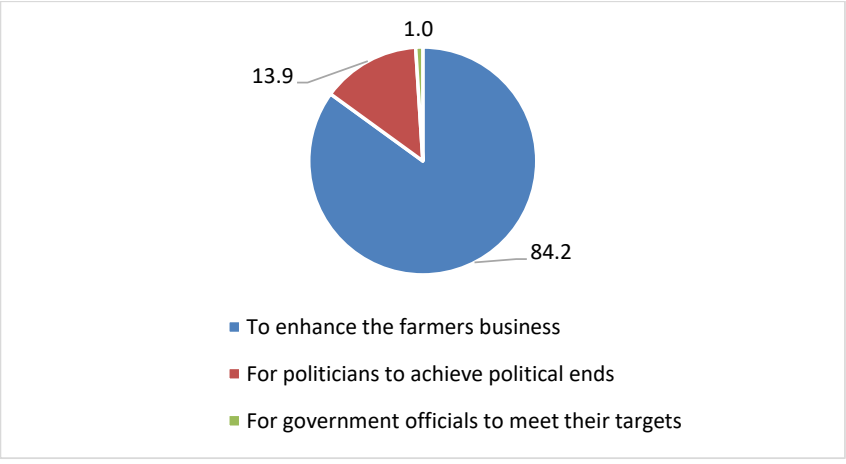


Figure 2 shows that 25.7% of respondents stated that government support was essential to ensuring sustainable production. Participants stressed that the grants helped increase profit margins, lower production costs, and supplement operating budgets. These views align with OECD (2019) findings that grants reduce operational risk and protect incomes. However, some of the farmers (16.8%) indicated that the quality of inputs provided was poor, and 7.9% of farmers found the support unsustainable due to its short-term nature. These concerns echo Ryba's (2025) finding that programme effectiveness is limited when implementation does not match local market needs. Some farmers mentioned that items procured by third parties were of inferior quality, which negatively affected their output. This highlights the importance of oversight and procurement transparency in grant implementation, reinforcing the need for integrated support systems.

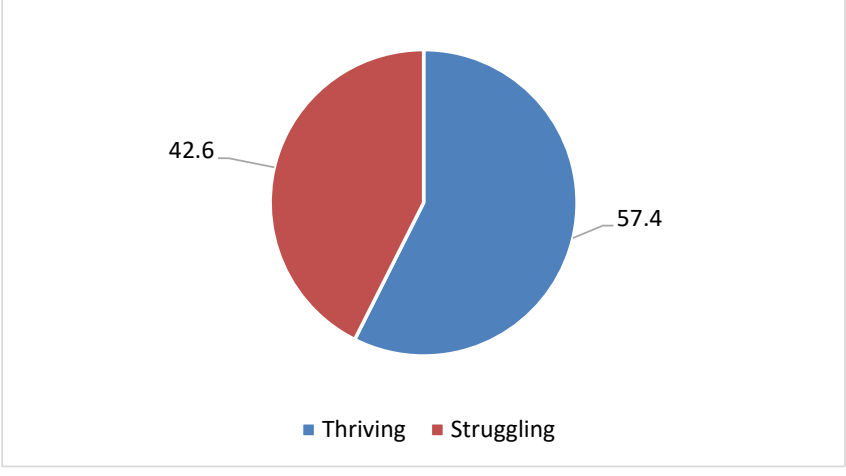
Some respondents referred to 'Bermuda' support, suggesting incomplete or mismatched aid (e.g., seeds without fertiliser or land prep without inputs). This points to systematic delivery gaps, consistent with Gopaul and Manley (2015), who noted that grant programmes often prioritise delivery volumes over quality outcomes. Figure 3 presents perceptions of government motivation for grant provision.

Figure 3 Government's motivation for providing grants (see online version for colours)



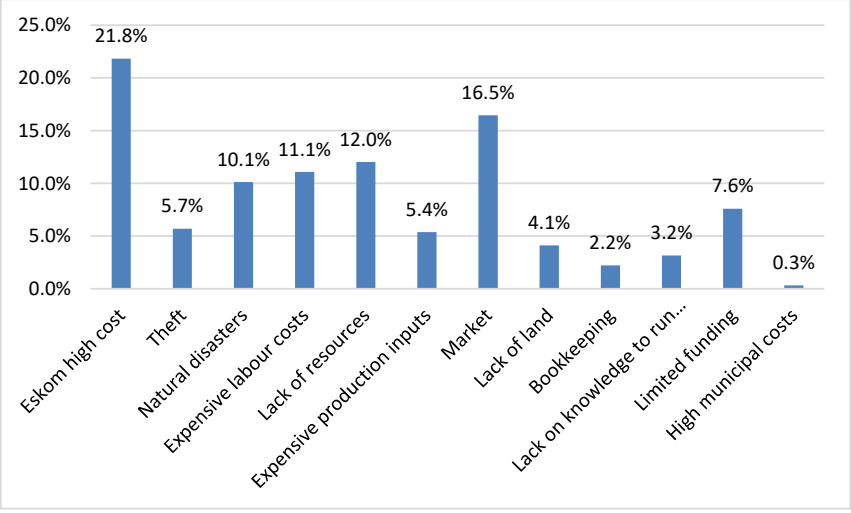
Looking at Figure 3, 13.9% of farmers believed that grant programmes are politically motivated rather than development oriented. This perceived misalignment with farmers needs could reduce engagement and lead to misuse of funds. Gopaul and Manley (2015) support this view, finding that many farmers feel grants are more about meeting quotas than fostering sustainable development. Figure 4 illustrates the self-reported sustainability status of respondents.

Figure 4 Smallholders' sustainability rate (see online version for colours)



As seen in Figure 4, 57.4% of farmers claimed their businesses were doing well, while 42.6% reported that their farms were struggling. Those struggling cited delayed grant cycles and poor seasonal alignment as major disruptions. These challenges mirror the findings of Von Loeper et al. (2017) and Bushe (2019), who found that sustainability is undermined by timing mismatches between input delivery and planting cycles, and by broader environmental and economic shocks. Figure 5 details the main operational challenges smallholders face.

Figure 5 Smallholders' main challenges (see online version for colours)



Regarding the farmers' main challenges experienced, the high cost of electricity was the leading issue (21.8%), followed by market access (16.5%), lack of capital or resources (12%), and high labour costs (11.1%), as illustrated in Figure 5. These findings corroborate Msomi and Zenda (2024), who identify market barriers, capital constraints, and limited access to inputs and technology as major obstacles in Gauteng. Natural disasters and climate risks were also cited (10.1%), reinforcing Bryan et al. (2013), who argue that climate resilience and adaptive capacity must be integral to smallholder support strategies.

Figure 6 Smallholders' business performance in the past year (see online version for colours)

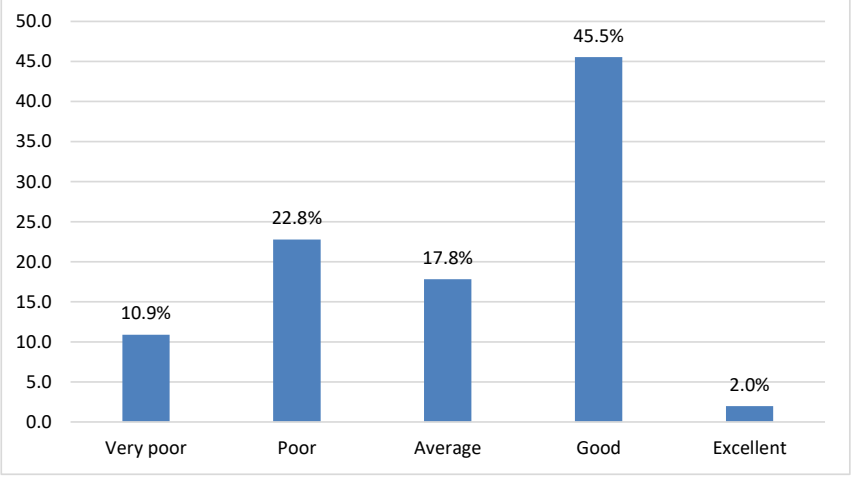


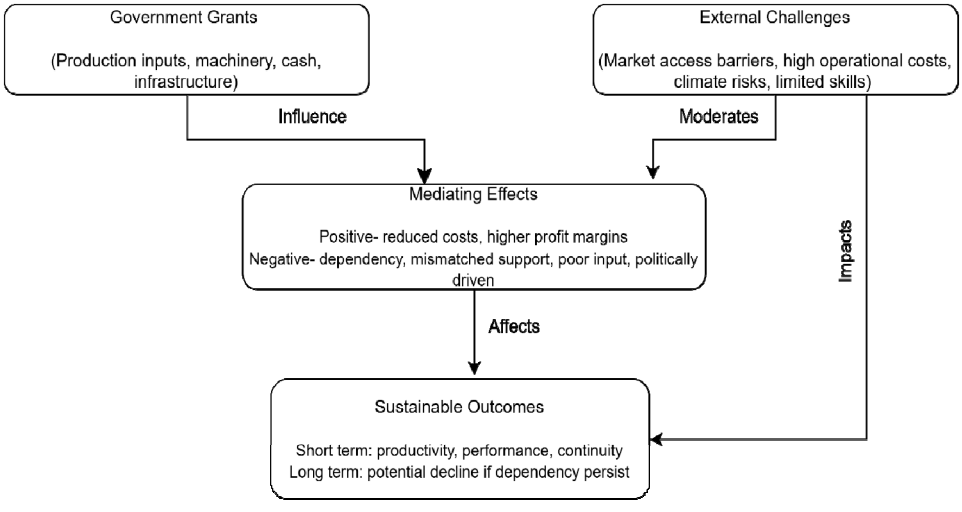
Figure 6 summarises the farmers' business performance over the past year. While 45.5% reported positive performance, 33% described their operations as poor, citing inadequate financing, input shortages, and limited market access as the main causes. This finding

supports Nguyen et al. (2024), who emphasise that institutional support and cooperative frameworks improve resilience and operational stability. Despite the benefits, some respondents showed signs of dependency on grants, expecting ongoing subsidisation. Skreli et al. (2018) and Aliber and Hall (2012) caution that grant dependency can reduce entrepreneurial initiative and undermine the long-term viability of smallholder farming.

Looking at similar results from Sub-Saharan Africa, Ringler (2010) and Shiferaw et al. (2012) reiterate that smallholder farmers encounter significant challenges, including limited access to credit, markets, and vital information, which hinder their ability to adapt to climate change and increase productivity. Additionally, similar to the results found in this study, Hofisi (2023) writes that financial inclusion policies frequently fall short, failing to meet the evolving needs of these farmers, especially in utilising emerging technologies like mobile money. Further supporting the results, research by Shiferaw et al. (2012) highlighted the necessity for greater investment in public goods, such as roads, communication networks, and agricultural research, to better support smallholder farmers. Moreover, Agafonova and Spektor (2024) write that government grants are a common form of assistance for agribusinesses, however, existing regulatory frameworks often overlook the unique risks associated with agriculture, leading to inefficiencies.

The findings from the aforementioned studies, together with the results from this study, show that while there are various policy trends aimed at supporting small agribusinesses and smallholdings across Sub-Saharan Africa, the effectiveness of these initiatives is often undermined by infrastructural, financial, and institutional challenges. In summary, while grants are positively associated with operational continuity and short-term performance, their sustainability impact is limited unless embedded within broader institutional, market, and planning frameworks, highlighting the importance of coordinated LED strategies.

Figure 7 Conceptual model illustrating how government grants impact agribusinesses' sustainability



Finally, to illustrate the relationship between grant support and sustainability outcomes, a conceptual model was developed, which is presented in Figure 7. This model shows how

government grants, offered in the form of production inputs, equipment, infrastructure, or cash, can impact the sustainability of agribusiness through various mediating factors.

As can be seen in Figure 7, positive effects include reduced production costs, improved profit margins, and enhanced operational continuity. However, there can also be negative consequences, such as grant dependency, mismatched or insufficient support, poor-quality inputs, and politically motivated allocations. These influences are further affected by external challenges, including barriers to market access, high operational costs, climate variability, and limited farmer skills. The interaction among these factors shapes both short-term outcomes, like improved productivity and performance, and long-term sustainability. If the underlying structural constraints are not addressed, long-term sustainability may be compromised.

5 Conclusions

The research findings underscore the vital role of government grants in supporting the sustainability of smallholder farmers in the Waterberg District Municipality. While these grants have proven beneficial by reducing production costs and increasing productivity, they have also led to a dependency that may hinder long-term sustainability. The study identified several obstacles to achieving sustainability, such as inadequate skills among farmers, flawed grant selection criteria, and disconnect between the farmers' business operations and the goals of the funding. These findings echo those of previous studies, which emphasise that without integrated and well-targeted support services – like technical training, extension support, and cooperative development – financial assistance may yield only short-lived results. The evidence from this study suggests that unless these structural challenges are addressed, grants alone are unlikely to secure lasting outcomes.

To overcome these challenges, several recommendations are put forward. First, there should be a focus on enhanced oversight and accountability. Implementing robust monitoring and evaluation systems will ensure that grants are used effectively and in line with their intended objectives. Regular assessments should be carried out to evaluate the impact of grants on the sustainability of smallholder farmers. Moreover, it is recommended to revise the criteria for awarding grants to better reflect the actual needs and potential of the farmers. This will improve the selection process, enabling beneficiaries who can utilise the funds effectively and sustainably. Additionally, capacity-building initiatives, including business management training and technical upskilling, should accompany grant distributions. This approach will empower farmers to operate more autonomously and lessen their reliance on government support.

From a policy standpoint, the study advocates for grant programs to be better synchronised with agricultural seasons, aligned with local market dynamics, and integrated into a broader strategy that encompasses infrastructure development, input supply chain efficiency, and access to extension services. These structural adjustments would ensure that grants contribute to a cohesive ecosystem of support, rather than functioning as isolated interventions. Local governments and stakeholders must invest in enhancing market access and infrastructure to uplift smallholder farmers. This includes improving supply chains, establishing storage facilities, and developing transportation networks to help farmers reach larger markets. Furthermore, strengthening partnerships between the government, the private sector, and non-governmental organisations would

create a more supportive ecosystem for smallholder farmers. Such collaboration can provide additional resources, expertise, and market opportunities.

The insights drawn from this study hold both academic and practical significance. They advocate for a shift in grant program design from mere transactional support to fostering transformative impacts. By embedding grant support within a wider framework for LED and institutional capacity-building, policymakers can unlock greater resilience and long-term success for smallholder farmers. By implementing these recommendations, the sustainability of smallholder farmers in the Waterberg District Municipality can be greatly enhanced, ultimately leading to improved LED and reduced poverty.

However, this study does have limitations. It primarily focuses on the Waterberg District Municipality in Limpopo, South Africa, which may restrict the generalisability of its findings to other regions with different socio-economic and agricultural conditions. Future research should, therefore, broaden its geographic scope to enable comparative analysis and gain national-level insights into the effects of government grants on agribusiness sustainability. Additionally, the use of a cross-sectional survey design captures data at only one point in time, limiting the ability to assess long-term effects. Future studies could implement longitudinal methods to better understand how sustainability develops post-grant receipt and determine which support mechanisms produce lasting outcomes. Employing mixed-method approaches that incorporate qualitative perspectives from farmers, government officials, and implementing agencies could also enrich future research by capturing the complex dynamics of grant utilisation and local implementation practices.

Declarations

Ethical clearance has been granted by the School of Economics Research Ethics Committee with the Ethics Clearance Code: 22SEO072.

All authors declare that they have no conflicts of interest.

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