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Examining the Effectiveness of Farmer Input Support Program in Improving Agricultural Productivity Among Small-Scale Farmers: A Case Study of Kanakantapa Ward, Chongwe District

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Abstract

This study examined the effectiveness of the Farmer Input Support Programme (FISP) in improving agricultural productivity among small-scale farmers in Kanakantapa Ward, Chongwe District. The study was guided by three specific objectives: to assess the level of participation of small-scale farmers in FISP, to examine the influence of FISP on crop yields, and to identify the limitations and challenges faced by farmers in accessing and benefiting from the programme. A descriptive research design was employed, using quantitative and qualitative approaches to collect and analyse data from small-scale farmers in the study area.

The findings revealed that participation in FISP was relatively high, with 62% of respondents actively enrolled in the programme, while 38% were either inactive or excluded. In terms of agricultural productivity, 54% of respondents reported increased crop yields after receiving FISP inputs, whereas 31% indicated no significant change, and 15% experienced reduced yields. Despite these improvements, the effectiveness of the programme was constrained by several challenges. The study found that 67% of respondents received insufficient input allocations, and 72% reported delays in input distribution beyond the optimal planting period, which negatively affected productivity outcomes. Additionally, 60% of farmers experienced difficulties in accessing registration services, while 64% lacked sufficient financial capacity to complement subsidised inputs.

The study concludes that although FISP contributes positively to improving access to agricultural inputs and enhancing productivity among some farmers, its overall effectiveness is limited by input inadequacy, delayed distribution, accessibility barriers, digital system challenges, and socio-economic constraints. The study recommends timely distribution of inputs, increased input allocations, improved accessibility of e-FISP services, strengthened extension support, and enhanced transparency in beneficiary selection to improve programme effectiveness.

Keywords: FISP, Agricultural Productivity, Small-Scale Farmers, Input Support, Kanakantapa Ward, Zambia

1. Introduction

1.1 Background of the Study

Agriculture plays a vital role in Zambia's economy by contributing to food security, employment and rural livelihoods. Small-scale farmers form the majority of agricultural producers, but many face challenges such as limited access to improved seed, fertiliser, farm equipment, credit and extension services. These challenges often contribute to low agricultural productivity and rural poverty (Kaoma & Mpundu, 2023).

To address these challenges, the Government of Zambia introduced the Farmer Input Support Programme (FISP), which aims to improve small-scale farmers' access to agricultural inputs at subsidised prices. The programme was introduced in 2002 as the Fertiliser Support Programme (FSP) and was renamed FISP in 2009. It provides eligible farmers with inputs such as fertiliser and improved maize seed to increase crop yields, household incomes and national food production. The programme targets small-scale farmers across Zambia, particularly those cultivating between one and five hectares (Ministry of Agriculture, 2024) [22].

FISP has undergone reforms, including the introduction of the electronic voucher system, intended to improve transparency, reduce input distribution delays and promote private-sector participation. However, evidence on its effectiveness remains mixed. Some studies report increased maize yields and household asset accumulation among beneficiaries (Chibwe, 2014), while others identify challenges such as late input delivery, limited coverage and targeting problems. Recent research on e-FISP found that beneficiaries did not always achieve significant improvements in maize yields due to implementation challenges (Kuteya *et al*., 2025) [14]. Therefore, this study examines FISP's effectiveness in improving agricultural productivity among small-scale farmers in Kanakantapa Ward, Chongwe District.

1.2 Statement of the Problem

The Farmer Input Support Programme (FISP) was introduced by the Government of Zambia to improve agricultural productivity among small-scale farmers through subsidised fertiliser and improved seed. Although the programme supported over one million farmers during the 2024/2025 farming season, many beneficiaries continue to experience low crop yields and unstable incomes due to delayed input distribution, climate change and limited extension services (Mtolo, 2024).

Recent studies show that the impact of FISP on agricultural productivity has been inconsistent across different regions. Research on the electronic Farmer Input Support Programme (e-FISP) found that beneficiaries did not always achieve higher maize yields because of implementation challenges and inefficiencies in input distribution (Kuteya *et al*., 2025) [14]. The 2023/2024 drought further worsened agricultural production, affecting about 43% of cultivated land and contributing to a 53% decline in grain production compared with the previous season. Furthermore, a 2025 government audit identified over 200,000 ineligible beneficiaries who had accessed FISP benefits, indicating weaknesses in targeting and programme implementation.

Although several studies have examined FISP in Zambia, limited evidence exists on its effectiveness among small-scale farmers in Kanakantapa Ward, Chongwe District. This study therefore seeks to assess the effectiveness of FISP in improving agricultural productivity among beneficiary farmers in the study area and contribute evidence to address this knowledge gap (Mvula & Siankwilimba, 2026).

1.3 General Objective

To examining the effectiveness of farmer input support program in improving agricultural productivity among small-scale farmers. a case study of Kanakantapa ward, Chongwe District.

1.3.1 Specific Objectives

1. To assess the level of participation of small-scale farmers in the Farmer Input Support Program (FISP) in Kanakantapa.
2. To assess the influence of FISP on crop yields among small-scale farmers in Kanakantapa.
3. To ascertain the limitations and challenges faced by small-scale farmers in accessing and benefiting from FISP in Kanakantapa.

1.4 Research Questions

1. What is the level of participation of small-scale farmers in the Farmer Input Support Program (FISP) in Kanakantapa Ward?
2. How has the Farmer Input Support Program (FISP) influenced crop yields among small-scale farmers in Kanakantapa Ward?
3. What limitations and challenges do small-scale farmers face in accessing and benefiting from the Farmer Input Support Program (FISP) in Kanakantapa Ward?

1.5 Theoretical Framework

The theoretical framework provides the foundation for understanding how government interventions influence agricultural productivity. This study is guided by the Agricultural Input Subsidy Theory and Digital Agriculture Services Theory. Together, the theories explain how subsidised inputs and digital systems can influence farmers' access to resources and agricultural outcomes.

The Agricultural Input Subsidy Theory suggests that subsidised fertiliser and improved seed reduce farming costs and enable small-scale farmers to use productive agricultural technologies, thereby increasing crop yields and food security (Mason *et al*., 2022) [20]. In Zambia, FISP applies this approach by providing subsidised inputs to eligible farmers. However, its effectiveness may also depend on rainfall, extension services, farmer skills and market access (Kuteya *et al*., 2025) [14].

Digital Agriculture Services Theory explains how technologies such as electronic vouchers and mobile systems can improve farmers' access to inputs and agricultural information. This study uses the theory to assess e-FISP and challenges such as network problems and limited digital skills. These theories therefore provide a basis for assessing FISP's effectiveness in Kanakantapa Ward.

1.6 Significance of the Study

This study is important because it contributes to understanding how government agricultural support programmes influence agricultural productivity among small-scale farmers. Agriculture plays a major role in Zambia's economy by supporting rural livelihoods, employment and national food security. Since small-scale farmers often face challenges such as limited access to improved inputs, credit and extension services, programmes such as the Farmer Input Support Programme (FISP) are important in supporting agricultural production (MoA, 2024) [22].

The findings will benefit policymakers, particularly the Ministry of Agriculture and other institutions responsible for agricultural development. The study will provide evidence on the effectiveness of FISP at local level and identify challenges affecting input distribution and programme implementation. This information may help improve the efficiency and targeting of the programme.

The study will also benefit small-scale farmers by identifying factors that influence their ability to access and effectively use subsidised inputs. Improved access to fertiliser and improved seed can contribute to higher crop yields and farm incomes when used effectively (Chibwe, 2017) [5].

Academically, the study will contribute to existing knowledge on agricultural subsidies and rural development by providing local evidence from Kanakantapa Ward. It will also provide useful information for researchers and students.

Ultimately, improving FISP implementation may contribute to increased agricultural productivity, food security, poverty reduction and sustainable rural development in Zambia.

1.7 Scope of the Study

This study focuses on examining the effectiveness of the Farmer Input Support Programme (FISP) in improving agricultural productivity among small-scale farmers in Kanakantapa, Chongwe District, Zambia. The study targets small-scale farmers who are beneficiaries of FISP within the selected ward. It assesses the extent to which the programme improves farmers' access to agricultural inputs, particularly fertiliser and improved seed, and how access to these inputs influences crop production.

The study also examines challenges faced by farmers in accessing and using FISP inputs. In addition, it considers other factors that may influence programme effectiveness, including access to agricultural extension services, farmer knowledge and environmental conditions. Geographically, the study is limited to Kanakantapa Ward and does not cover other wards or districts in Zambia. The target population consists of small-scale farmers participating in FISP within the study area. Therefore, the findings will mainly apply to Kanakantapa Ward, although they may provide useful insights for improving similar agricultural support programmes elsewhere in Zambia.

2. Literature Review

2.1 Level of Participation of Small-Scale Farmers in the Farmer Input Support Programme (FISP)

Previous studies show that participation in agricultural input subsidy programmes is influenced by access to inputs, programme design, targeting and implementation. Tambo *et al*. (2024), using data from 1,048 maize plots in Zambia, found that FISP participation significantly influenced farmers' production and pest-management practices. However, beneficiaries were 67 percentage points more likely to use synthetic pesticides, while participation reduced the adoption of preventive practices such as crop rotation and intercropping. This suggests that participation does not always promote sustainable farming practices.

Karata (2024) found that Tanzania's input subsidy programme did not significantly improve maize yields, production or income for most beneficiaries. However, farmers with larger farms recorded a 7.9% increase in maize yield and an 8.7% increase in production, indicating that better-resourced farmers benefited more. Similarly, Sianjase and Seshamani (2023) found that FISP participation was particularly important for low-productivity farmers, with 36.2% of households at the 5th production percentile depending on subsidies to maintain maize production.

In Zambia, Nalwimba *et al*. (2018) found that the e-voucher system improved input accessibility and reduced some bureaucratic barriers, encouraging participation. However, voucher activation delays, banking problems and inadequate input stocks limited full participation. More recent evidence from Kuteya *et al*. (2025) [14] indicates that e-FISP beneficiaries experienced a decline in maize yields from 2,177 kg/ha to approximately 1,712 kg/ha, largely due to delays, rising input prices and logistical challenges.

Overall, the literature shows that FISP encourages participation by improving access to subsidised inputs, but participation and benefits vary among farmers. However, most existing studies focus on national, provincial or other district-level evidence. There is limited empirical evidence specifically measuring the level of participation of small-scale farmers in FISP in Kanakantapa Ward, Chongwe District. In particular, little is known about the proportion of eligible farmers participating, their frequency of participation, accessibility of FISP inputs, and the factors encouraging or limiting participation. This study therefore seeks to fill this geographical and empirical gap by examining FISP participation among small-scale farmers in Kanakantapa Ward.

2.2 Influence of FISP on Crop Yields among Small-Scale Farmers in Kanakantapa

Existing studies generally show that agricultural input subsidy programmes can improve crop yields, although the results vary depending on implementation, farm characteristics and access to complementary services. Agyemang *et al*. (2022) found that subsidised fertiliser and improved seed significantly increased crop productivity among small-scale farmers in Ghana. The study also found that the size of the subsidy mattered, with inadequate input packages producing limited yield improvements. This suggests that FISP effectiveness depends on the adequacy and appropriateness of inputs provided.

Similarly, Nyirongo *et al*. (2025) found that subsidies increased fertiliser and hybrid seed use among Malawian smallholders, contributing to higher maize productivity. However, average technical efficiency was only 56%, indicating that farmers could improve production through better input use, farm management and extension support. Hemming *et al*. (2018), based on evidence from several developing countries, reported an average yield increase of approximately 11% among farmers receiving input subsidies. However, they noted that the effects varied according to programme design, targeting and agro-ecological conditions.

Evidence from Zambia presents more mixed results. Chibbompa (2018) [4], studying 154 farmers in Lukanda Agricultural Camp, found that FISP e-voucher participation resulted in a modest 2.8% increase in maize yields. In contrast, Kuteya *et al*. (2025) [14] found that e-FISP beneficiaries experienced a decline in maize yields from 2,177 kg/ha to approximately 1,712 kg/ha, representing a reduction of about 315 kg/ha compared with non-beneficiaries. The decline was associated with delayed input delivery, rising input prices, logistical problems and reduced fertiliser use. Karata (2024) similarly found no statistically significant overall improvement in maize productivity under Tanzania's subsidy programme, although some groups experienced positive effects.

Jayne *et al*. (2018) further concluded that input subsidies generally produce positive but modest yield gains. They identified poor targeting, weak soil conditions, limited extension services and "crowding out" of commercial input purchases as factors that reduce programme effectiveness. Recent World Bank evidence (2026) [28], however, suggests that Zambia's shift towards flexible e-vouchers and greater farmer choice may improve yields by providing more appropriate inputs and strengthening agro-dealer networks.

Overall, the literature indicates that FISP can influence crop yields positively, but its effects are inconsistent and strongly depend on timely delivery, adequate inputs, effective targeting, farmer knowledge, extension services and market access. The main research gap is that existing studies largely

provide national, regional or evidence from other districts, with limited empirical evidence on the actual influence of FISP on crop yields among small-scale farmers in Kanakantapa Ward, Chongwe District. The current study therefore seeks to determine whether FISP participation has resulted in measurable improvements in crop yields in the study area and identify the factors influencing these outcomes.

2.3 Limitations and Challenges Faced by Small-Scale Farmers in Accessing and Benefiting from FISP in Kanakantapa

Existing literature shows that although FISP improves small-scale farmers' access to subsidised agricultural inputs, several challenges limit its effectiveness. Kuntashula and Mwelwa-Zgambo (2022) [13] found that FISP increased production diversity and income diversification among beneficiary households. However, these improvements did not consistently translate into better food security and nutrition outcomes. They identified inadequate targeting, inefficient input delivery, and limited access to complementary services such as extension, irrigation and markets as important constraints.

Jayne and Kherallah and other researchers found that poor targeting can result in subsidies benefiting relatively better-off farmers rather than the poorest households. The crowding-out effect is another challenge, where subsidised fertiliser replaces farmers' normal commercial purchases instead of increasing total fertiliser use. Late input delivery, high administrative costs and weak coordination between government and private-sector actors further reduce programme effectiveness (Dorward & Chirwa, 2011).

Burke and Jayne (2016) found that fertiliser responses vary considerably depending on soil fertility, rainfall, soil acidity and farming practices. Therefore, farmers may receive subsidised fertiliser but achieve limited yield improvements. They also identified barriers such as cooperative membership requirements, farmer contributions and limited access among poorer households.

More recent evidence by Kuteya *et al*. (2025) [14] found that e-FISP beneficiaries experienced declining maize yields, showing that subsidised inputs alone do not guarantee higher productivity. They also identified delays in voucher redemption, logistical problems, unequal access and inadequate extension support. Similarly, Nguni and Haabazoka (2024) found that delayed Treasury funding contributed to late input delivery, while excessive concentration of agricultural funding on FISP reduced resources available for extension, infrastructure and capacity building.

Overall, the literature shows that the main challenges include late input delivery, poor targeting, unequal access, inadequate extension services, weak markets, soil-related constraints, funding delays and limited complementary support. However, most studies provide national or broader regional evidence. There is limited empirical evidence on the specific challenges faced by small-scale farmers in accessing and benefiting from FISP in Kanakantapa Ward, Chongwe District. This study therefore seeks to fill this local research gap by examining the specific barriers affecting farmers in the study area.

2.4 Personal Critique of the Literature Review

The reviewed literature provides useful evidence on the participation, influence and challenges of FISP in Zambia. Studies by Kuntashula and Mwelwa-Zgambo (2022) [13], Kuteya *et al*. (2025) [14], and Nguni and Haabazoka (2024) show that FISP improves access to subsidised fertiliser and improved seed. However, increased participation does not always result in higher crop yields or improved food security, particularly among poorer and resource-constrained households.

A major strength of the literature is the use of quantitative evidence to assess FISP outcomes. However, many studies rely on household surveys and short-term data, which may not adequately explain long-term productivity, income and food-security effects. The literature also identifies important challenges such as delayed input delivery, poor targeting, inadequate extension services, funding delays and logistical problems. Nevertheless, there is limited understanding of how these challenges interact with farmers' socio-economic conditions.

Another limitation is that most studies provide national, provincial or broad regional findings. They give limited attention to specific wards and local farming conditions. Furthermore, qualitative issues such as farmers' experiences, perceptions and decision-making are not sufficiently explored.

Therefore, the literature provides a strong foundation but leaves a local research gap concerning Kanakantapa Ward, Chongwe District. This study addresses the gap by examining FISP participation, its influence on crop yields, and the specific challenges affecting small-scale farmers in the study area.

2.5 Establishment of the Research Gap

Despite extensive research on FISP, important gaps remain. Most studies provide national, provincial or district-level findings, with limited evidence from specific local areas such as Kanakantapa Ward, Chongwe District. Differences in socio-economic conditions, infrastructure, farming practices and agro-ecological conditions may influence farmers' participation, input utilisation and crop yields.

Existing e-voucher studies mainly examine short-term outcomes, giving limited attention to how the timing and accessibility of inputs, farmer decision-making and support services affect productivity. In addition, much of the literature focuses on crop yields and production, while less attention is given to the relationship between FISP, household food security and dietary diversity.

Institutional challenges such as delayed funding, inefficient agro-dealer systems and inadequate extension services are recognised but are not always examined together with farmers' socio-economic characteristics. Gender-related differences in access and benefits, particularly among female-headed households, also require further investigation.

Therefore, this study addresses these gaps by examining FISP participation, its influence on crop yields, and challenges faced by small-scale farmers in Kanakantapa Ward. The study will provide context-specific evidence to support improved programme implementation, targeting and policy development.

3. Research Methodology

3.1 Research Design

The study used a descriptive research design with a mixed-methods approach to assess the effectiveness of farmer input

support programmes among small-scale farmers in Kanakantapa Ward. Quantitative methods measured the relationship between input support and agricultural productivity, while qualitative methods explored farmers' experiences and perceptions. The combination of both methods provided comprehensive information about the programme. Similar approaches have been used in Zambian agricultural studies (Kaoma & Mpundu, 2023; Kuteya, Kalinda & Kuntashula, 2025 [14]). Therefore, the design was appropriate for assessing the programme's effectiveness in improving agricultural productivity.

3.2 Target Population

The target population comprised small-scale farmers, agricultural extension officers, and cooperative leaders in Kanakantapa Ward, Chongwe District. The ward had an estimated population of 14,017 people according to the 2022 Census. The study mainly focused on farmers benefiting from the Farmer Input Support Programme (FISP). Smallholder farmers are key beneficiaries of agricultural input support in Zambia (Moonga & Qutieshat, 2023) [23]. Therefore, they provided relevant information on the programme's effectiveness in improving agricultural productivity.

3.3 Sample Design

The study selected a sample size of 100 respondents from the target population in Kanakantapa Ward. The sample comprised 85 small-scale farmers benefiting from the Farmer Input Support Programme (FISP), 10 cooperative leaders, and 5 agricultural extension officers. The sample size was considered adequate for collecting reliable information on the effectiveness of FISP. It also allowed the researcher to manage data collection and analysis effectively within the available time and resources. Similar moderate sample sizes have been used in agricultural input support studies to assess programme impacts at community level (Zulu, 2016) [30].

3.4 Sample Size

The study used a sample size of 100 respondents selected from the target population in Kanakantapa Ward. The sample included 85 small-scale farmers who benefited from the Farmer Input Support Programme (FISP), 10 cooperative leaders, and 5 agricultural extension officers. This sample size was considered adequate for obtaining reliable information about the effectiveness of FISP in improving agricultural productivity. It also allowed the researcher to collect and analyse data effectively within the available time and resources. According to Zulu (2016) [30], moderate sample sizes are suitable for evaluating agricultural input support programmes at community level and ensuring effective data collection and analysis.

3.5 Data Collection Methods

The study used both primary and secondary data collection methods. Structured questionnaires were administered to small-scale farmers benefiting from FISP to collect information on inputs received, crop production, programme effectiveness, and challenges in accessing inputs. Semi-structured interviews were conducted with agricultural extension officers and cooperative leaders to obtain detailed information on programme implementation, input distribution, challenges, and effects on agricultural productivity. Questionnaires provided standardised quantitative data, while interviews provided deeper qualitative insights. Secondary data were obtained from government reports, journal articles, policy documents, and previous studies. These sources provided background information on FISP and its role in improving farmers' access to agricultural inputs and increasing productivity in Zambia (World Bank, 2021; Ministry of Agriculture, 2024 [22]).

3.6 Data Analysis

The study used both quantitative and qualitative data analysis methods. Quantitative data from questionnaires were coded and analysed using SPSS or Microsoft Excel, with frequencies, percentages, tables, and charts used to present findings. Qualitative data from interviews with agricultural extension officers and cooperative leaders were analysed using thematic analysis to identify key themes and patterns. The findings from both methods were integrated to provide a comprehensive understanding of the effectiveness of the Farmer Input Support Programme (FISP) in improving agricultural productivity among small-scale farmers. This approach helped the researcher interpret respondents' views and draw meaningful conclusions (Savenye & Robinson, 2014; Saunders *et al*., 2019).

3.7 Triangulation

Triangulation involved using multiple methods and data sources to improve the validity and reliability of the study findings. The study combined questionnaires, interviews, and secondary data to examine the effectiveness of FISP. Information collected from farmers was compared with responses from agricultural extension officers and cooperative leaders to identify consistency. This process helped reduce bias, cross-check information, and provide different perspectives on the research problem. Therefore, triangulation strengthened the credibility and accuracy of the findings regarding the effectiveness of the Farmer Input Support Programme (Bryman & Bell, 2019).

3.8 Limitations of the Study

The study faced several limitations that may have affected the research findings. Financial constraints limited the researcher's ability to reach a larger sample or cover areas beyond Kanakantapa Ward, reducing the generalisability of the findings to all small-scale farmers in Zambia. Time constraints also limited prolonged engagement with respondents and the depth of data collection. Some respondents were reluctant to provide detailed information about their agricultural productivity and experiences with FISP, which may have affected the completeness of the responses. Additionally, the study relied partly on self-reported information, which may have been affected by recall errors or exaggeration. However, the researcher used triangulation and multiple data sources, including questionnaires, interviews, and secondary information, to cross-check the findings. These measures helped reduce potential bias, strengthen the reliability of the data, and improve the overall credibility of the study findings.

3.9 Ethical Considerations

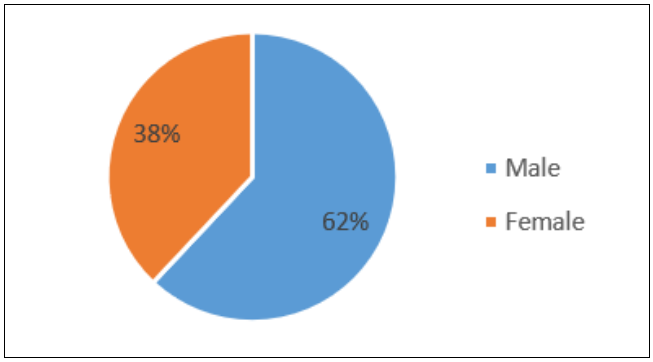
Ethical considerations were observed to protect the rights, dignity, privacy, and well-being of all participants. Informed consent was obtained before data collection, and

respondents were informed about the purpose of the study, their participation, and their right to withdraw at any time without penalty. Confidentiality and anonymity were maintained by keeping respondents' identities private and using the information only for academic purposes. Participants were treated with respect, and no personal identifying information was included in the final report. The researcher also ensured honesty, transparency, and integrity throughout the study. All information obtained from other sources was properly acknowledged through appropriate referencing. These ethical practices helped ensure that the research was conducted responsibly and professionally.

4. Research Findings and Discussion of Results

4.1 Demographic Characteristics of Respondents

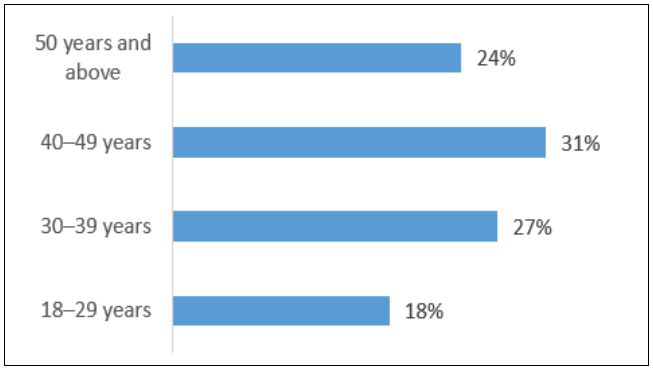
This section presents the demographic characteristics of respondents, including age distribution, gender, education level, farming experience, and household size of small-scale farmers.



Source: Primary Data, 2026

Fig 4.1.1: Gender of Respondents

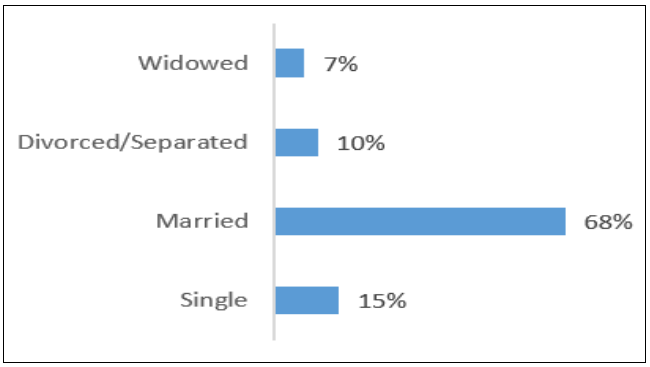
The results show that 62% of respondents were male while 38% were female. This means that most farmers participating in the study were men. However, women also formed a significant proportion of the respondents. This shows that both men and women benefit from FISP. Therefore, agricultural programmes should continue supporting both genders equally.



Source: Primary Data, 2026

Fig 4.1.2: Age Group of Respondents

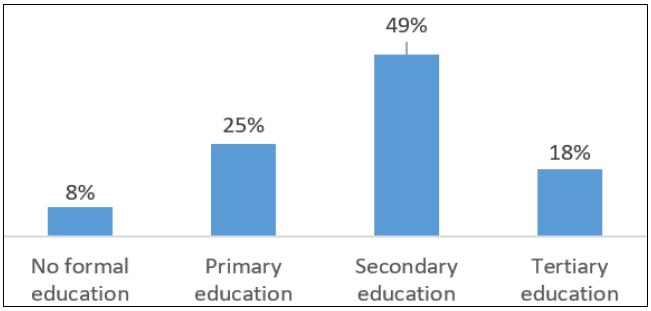
The largest group of respondents (31%) was aged between 40 and 49 years. This indicates that farming is mainly carried out by mature adults. These farmers are likely to have more farming experience and knowledge. Their experience may help them use FISP inputs effectively. This can contribute to increased agricultural productivity.



Source: Primary Data, 2026

Fig 4.1.3: Marital Status

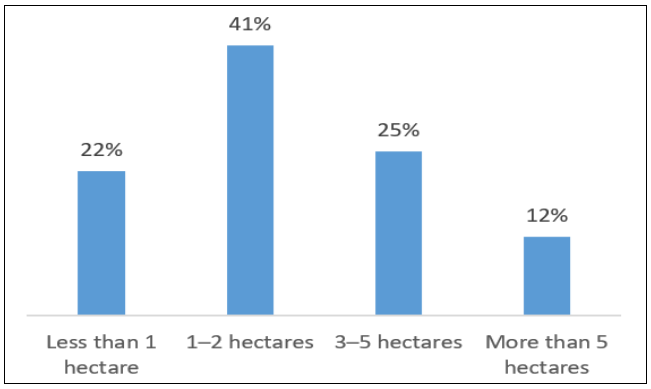
Most respondents (68%) were married. Married households often have more family members who can assist with farming activities. Family labour can help improve farm operations and productivity. This may increase the benefits obtained from FISP. Therefore, marital status may positively influence farming performance.



Source: Primary Data, 2026

Fig 4.1.4: Level of Education

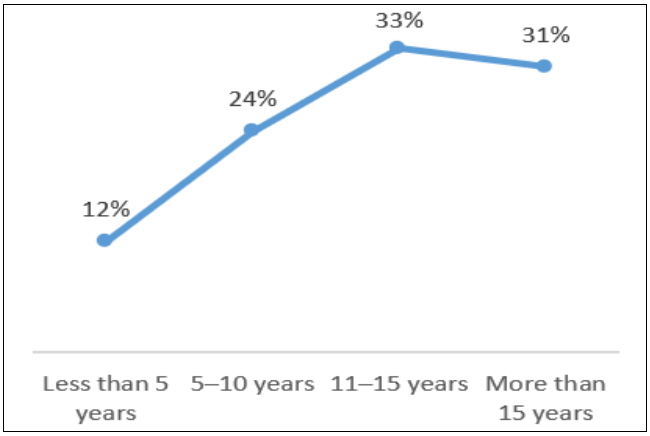
The findings show that 49% of respondents had secondary education. This suggests that most farmers can read and understand agricultural information. Educated farmers are more likely to adopt improved farming methods. They can also use farm inputs more effectively. As a result, education may contribute to higher productivity.



Source: Primary Data, 2026

Fig 4.1.5: Farming Experience

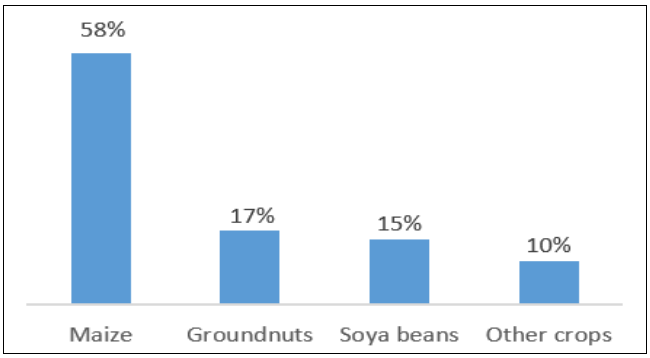
Most respondents had more than 10 years of farming experience. This shows that many farmers have good knowledge of agricultural activities. Experienced farmers are better able to manage crops and farm inputs. They can also assess the impact of FISP on their farming. Therefore, farming experience may improve productivity.



Source: Primary Data, 2026

Fig 4.1.6: Farm Size

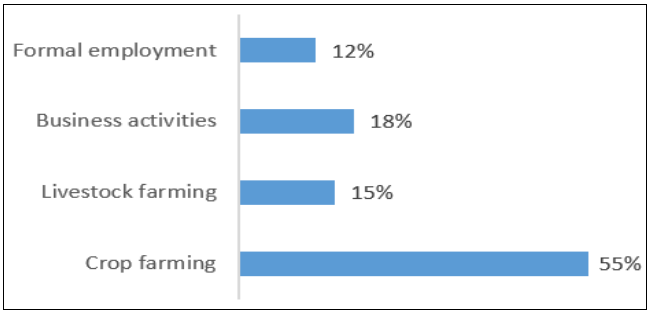
The majority of respondents (41%) cultivated between 1 and 2 hectares. This confirms that most participants were small-scale farmers. Small-scale farmers often depend on government support programmes such as FISP. Access to subsidised inputs can help them increase production. Therefore, FISP is important for improving their productivity.



Source: Primary Data, 2026

Fig 4.1.7: Distribution of Main Crop Grown by participants

Maize was the most common crop grown by respondents (58%). This is because maize is the main staple food crop in Zambia. Many farmers use FISP inputs to improve maize production. Higher maize yields can improve both food security and household income. Therefore, maize remains an important crop in the study area.

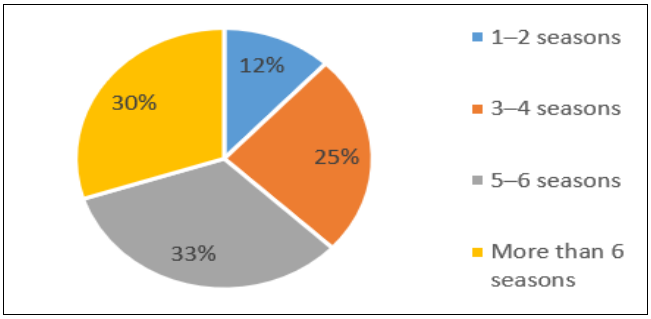


Source: Primary Data, 2026

Fig 4.1.8: Main Source of Household Income

More than half of the respondents (55%) depended on crop farming as their main source of income. This shows that agriculture is very important for household livelihoods. Any improvement in crop production can increase household earnings. FISP can help farmers achieve better yields and income. Therefore, the programme plays a key role in supporting rural households.

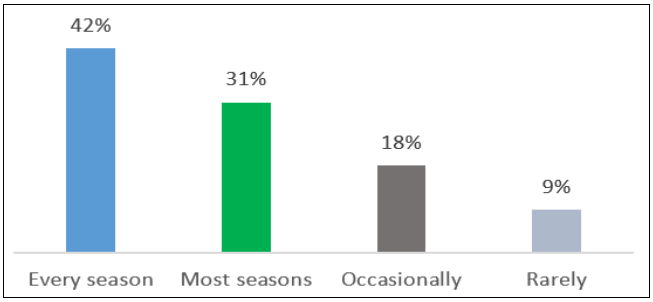
4.2 Assess the Level of Participation of Small-Scale Farmers in the Farmer Input Support Programme (FISP)



Source: Primary Data, 2026

Fig 4.2.1: Distribution of number of farming seasons participants have participated in FISP

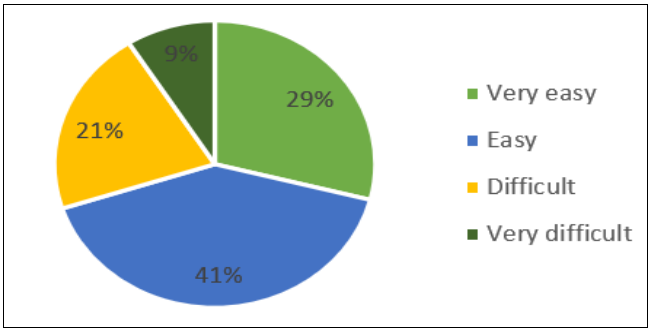
The results show that 33% of farmers had participated in FISP for 5–6 seasons. Another 30% had participated for more than 6 seasons. This means that most farmers have been involved in the programme for a long time. Long-term participation suggests that farmers find the programme useful. It also indicates continued trust in FISP.



Source: Primary Data, 2026

Fig 4.2.2: Distribution of how often participants receive farming inputs after registering for FISP

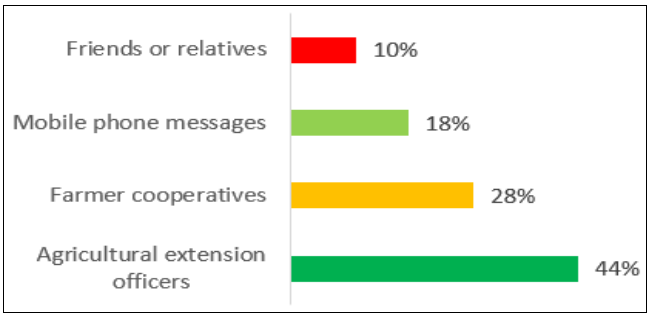
The findings indicate that 42% of respondents receive inputs every season. A further 31% receive inputs in most seasons. This shows that many farmers consistently benefit from FISP. Regular access to inputs can improve crop production. Therefore, the programme is reaching many registered farmers.



Source: Primary Data, 2026

Fig 4.2.3: Distribution of how easy it is for participants to access FISP services in the area

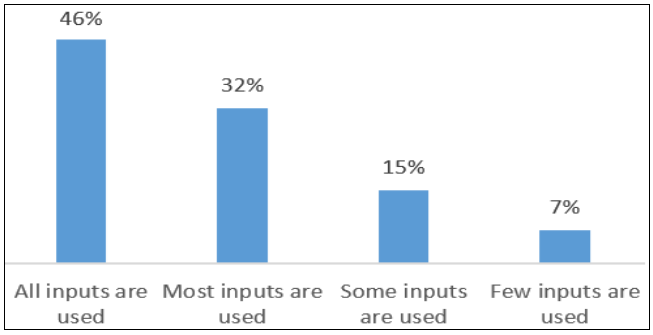
The majority of respondents (41%) reported that accessing FISP services was easy. Another 29% found it very easy. This suggests that most farmers can access programme services without major challenges. However, some still experience difficulties. Improving service delivery could benefit all farmers.



Source: Primary Data, 2026

Fig 4.2.4: Distribution of how participants usually receive information about FISP

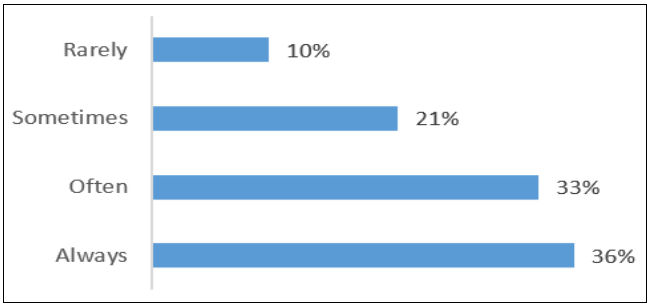
The findings show that 44% of respondents receive FISP information from extension officers. Farmer groups accounted for 28% of responses. This indicates that extension officers are the main source of programme information. Reliable information helps farmers understand FISP procedures. It also promotes effective participation in the programme.



Source: Primary Data, 2026

Fig 4.2.5: The extent of participants use of inputs received through FISP on farms

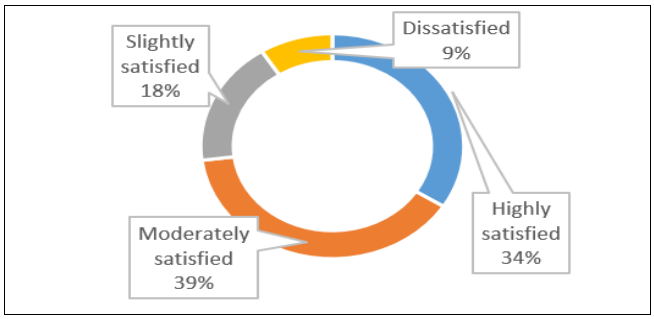
The results indicate that 46% of farmers use all the inputs received through FISP. Another 32% use most of the inputs. This shows that the majority of farmers utilise the support provided. Proper use of inputs can increase agricultural productivity. Therefore, FISP inputs are generally being used effectively.



Source: Primary Data, 2026

Fig 4.2.6: Distribution of how participants often use the e-FISP system when accessing farming inputs

The findings show that 36% of respondents always use the e-FISP system. Another 33% use it often. This means that digital systems are widely used among beneficiaries. The e-FISP system may improve efficiency and transparency. It also makes access to inputs easier for farmers.

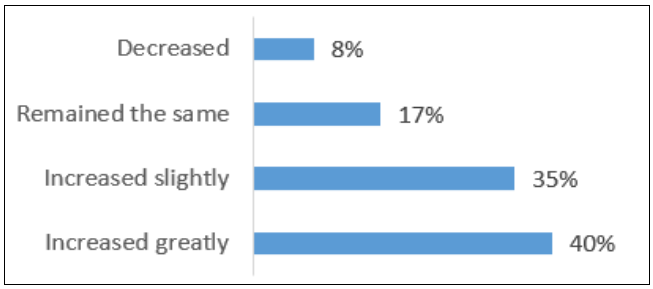


Source: Primary Data, 2026

Fig 4.2.7: Distribution of how satisfied the farmers are you with their participation in FISP

The results reveal that 39% of respondents were moderately satisfied with FISP participation. A further 34% were highly satisfied. This indicates that most farmers are pleased with the programme. Satisfaction may result from access to farming inputs and support services. Therefore, FISP appears to be benefiting many farmers.

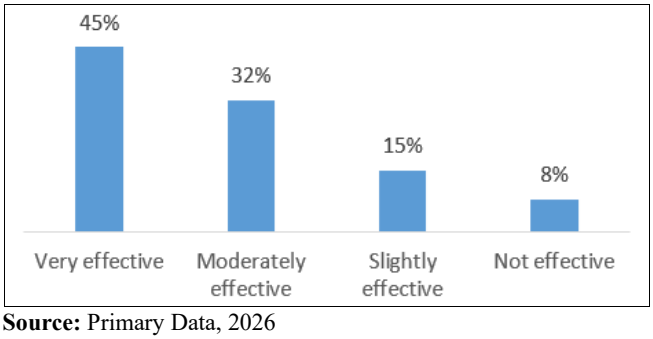
4.3 Assessing the Influence of FISP on Crop Yields Among Small-Scale Farmers



Source: Primary Data, 2026

Fig 4.3.1: Participants description of crop yields since joining FISP

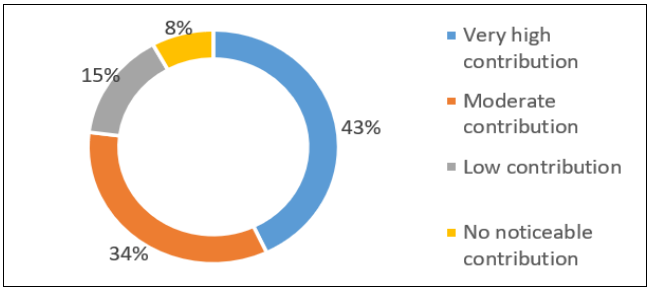
The results show that 40% of farmers reported a great increase in crop yields after joining FISP. Another 35% experienced a slight increase. This indicates that the programme has helped many farmers improve production. Better access to seeds and fertiliser may have contributed to these results. Therefore, FISP appears to have positively influenced crop yields.



Source: Primary Data, 2026

Fig 4.3.2: Distribution of effective seed varieties provided through FISP in improving crop yields

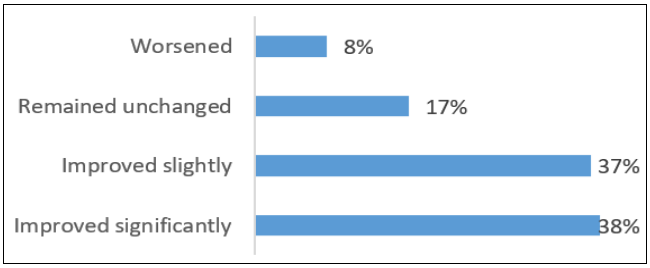
The results indicate that 45% of respondents considered FISP seed varieties very effective. Another 32% viewed them as moderately effective. This means that most farmers benefit from improved seed varieties. Quality seeds often result in better crop performance and higher yields. Therefore, improved seeds contribute significantly to productivity.



Source: Primary Data, 2026

Fig 4.3.3: Distribution rate contribution of fertiliser received through FISP to crop production

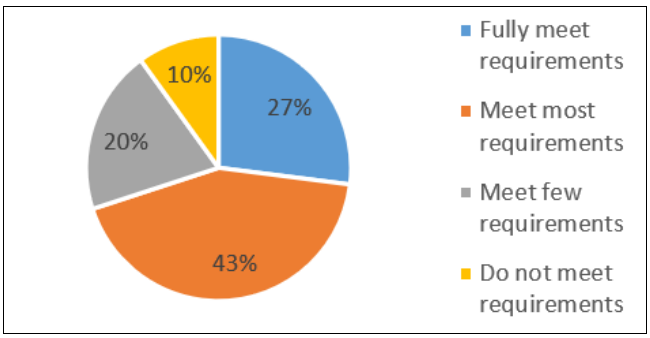
The findings show that 43% of respondents rated fertiliser contribution as very high. Another 34% indicated a moderate contribution. This suggests that fertiliser is an important factor in improving crop growth. Adequate fertiliser application increases crop yields and productivity. Therefore, fertiliser support under FISP benefits farmers greatly.



Source: Primary Data, 2026

Fig 4.3.4: Distribution of household food availability change since participating in FISP

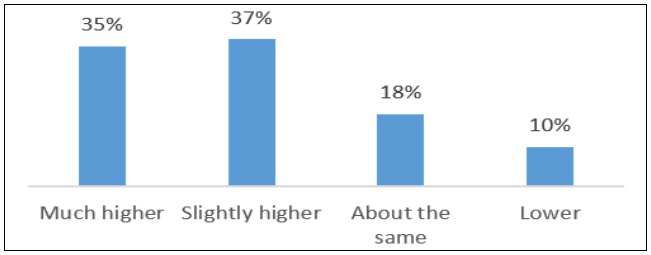
The findings indicate that 38% of respondents experienced significant improvement in food availability. Another 37% reported slight improvement. This suggests that FISP has contributed to increased household food production. Better food availability can improve household welfare and nutrition. Therefore, the programme supports food security among beneficiaries.



Source: Primary Data, 2026

Fig 4.3.5: The extent to which FISP inputs meet farmers crop production requirements

The results show that 43% of farmers said FISP inputs meet most of their production requirements. Another 27% indicated that the inputs fully meet their needs. This means that the programme provides substantial support to many farmers. However, some farmers still require additional inputs. Therefore, increasing input allocation may improve productivity further.

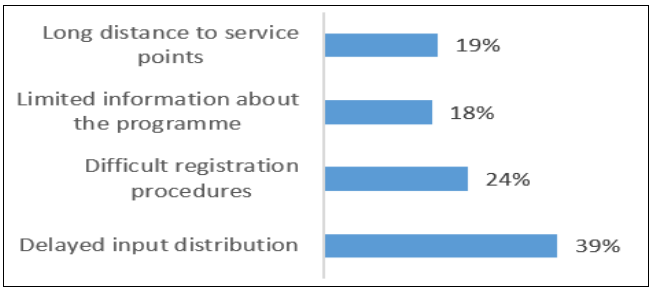


Source: Primary Data, 2026

Fig 4.3.6: A comparison of farm productivity between farmers who benefit from FISP and those who do not

The findings reveal that 37% of respondents considered their productivity slightly higher than non-beneficiaries. Another 35% viewed it as much higher. This suggests that FISP beneficiaries generally perform better than farmers who do not receive support. Access to inputs likely contributes to these differences. Therefore, FISP positively influences farm productivity.

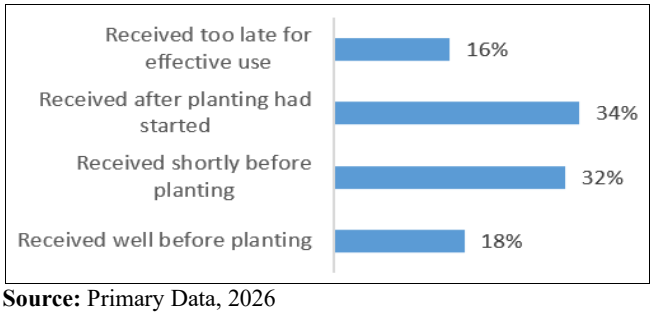
4.4 Ascertains the Limitations and Challenges Faced by Small-Scale Farmers in Accessing and Benefiting from FISP



Source: Primary Data, 2026

Fig 4.4.1: The main challenge faced when accessing FISP

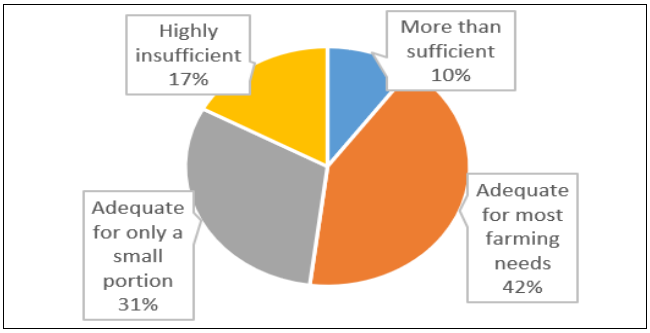
The findings show that 39% of respondents identified delayed input distribution as the main challenge. This means many farmers do not receive inputs at the right time. Late inputs can affect planting schedules and crop performance. Some farmers also face registration and information challenges. Therefore, improving input distribution could increase programme effectiveness.



Source: Primary Data, 2026

Fig 4.4.2: Timeliness of receiving FISP inputs

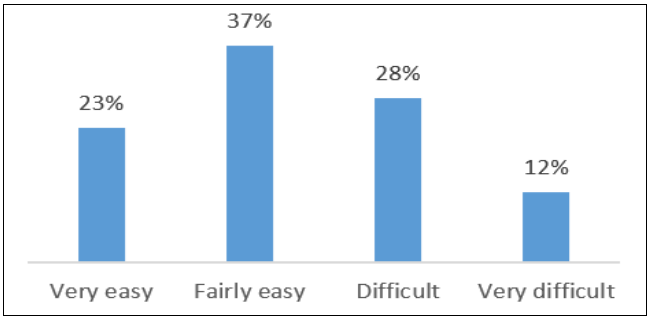
The results reveal that 34% of respondents received inputs after planting had already started. Another 16% received them too late for effective use. This indicates delays in the delivery of FISP inputs. Timely access to inputs is important for good crop production. Therefore, late distribution remains a major challenge.



Source: Primary Data, 2026

Fig 4.4.3: Quantities of inputs provided through FISP

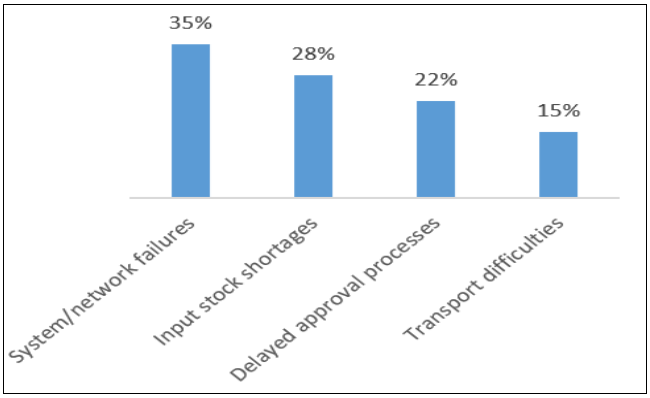
The majority of respondents (42%) stated that FISP inputs were adequate for most farming needs. However, 31% said the inputs only covered a small portion of their needs. This suggests that some farmers require more support. Limited input quantities may reduce production potential. Therefore, increasing input allocations could improve productivity.



Source: Primary Data, 2026

Fig 4.4.4: The use of e-FISP system when obtaining inputs

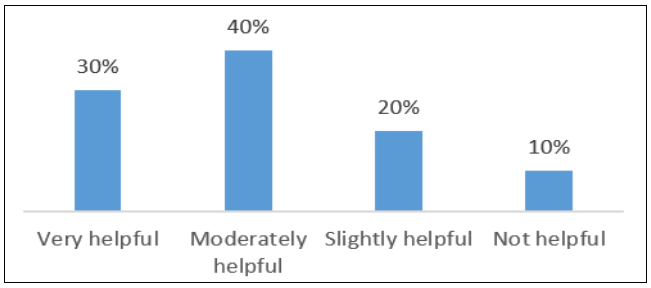
The findings show that 37% of respondents found the e-FISP system fairly easy to use. However, 40% reported difficulties in using the system. This may be due to poor network coverage or limited digital skills. Such challenges can delay access to inputs. Therefore, training and technical support are needed.



Source: Primary Data, 2026

Fig 4.4.5: Challenges commonly experienced when redeeming FISP inputs

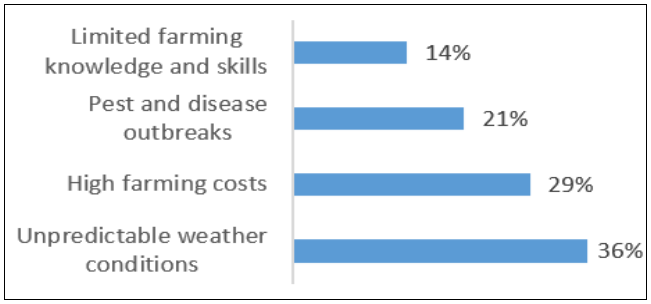
The results reveal that system and network failures were the most common challenge, affecting 35% of respondents. Stock shortages and approval delays were also common. These issues can prevent farmers from receiving inputs on time. Delays may affect planting and crop production. Therefore, system efficiency should be improved.



Source: Primary Data, 2026

Fig 4.4.6: Support provided by agricultural extension officers regarding FISP

The majority of respondents (40%) rated extension support as moderately helpful. Another 30% considered it very helpful. This shows that extension officers play an important role in supporting farmers. Their guidance helps farmers understand and use FISP effectively. Therefore, extension services should be strengthened further.



Source: Primary Data, 2026

Fig 4.4.7: Factors which limits the ability to benefit fully from FISP

The findings show that unpredictable weather conditions were the greatest challenge, reported by 36% of respondents. High farming costs were the second most common challenge. These factors can reduce the benefits of FISP even when inputs are provided. Poor weather and high costs affect crop production and profits. Therefore, complementary support measures are needed to maximise FISP benefits.

4.5 Discussion of Findings

This section presents a detailed discussion of the study findings on the effectiveness of the Farmer Input Support Programme (FISP) in improving agricultural productivity among small-scale farmers in Kanakantapa Ward, Chongwe District. The discussion is structured according to the study objectives, focusing on participation levels, influence on crop yields, and challenges affecting access and benefit from the programme.

4.5.1 Level of participation of small-scale farmers in FISP

The study examined the level of participation of small-scale farmers in the Farmer Input Support Programme (FISP) in Kanakantapa Ward, Chongwe District, focusing on

registration and enrolment rates, awareness and inclusion, categories of beneficiaries, and factors influencing participation. The findings indicate that participation in FISP is relatively high but uneven, reflecting both progress in programme outreach and persistent inclusion gaps.

Regarding registration and enrolment, the results showed that 62% of respondents were registered and actively enrolled in FISP, while 23% had previously been enrolled but were no longer active participants, and 15% had never participated in the programme. This suggests that although a majority of farmers are integrated into the programme, a significant proportion remains either inactive or excluded entirely. These findings imply that FISP coverage in the study area is substantial but not universal, limiting its overall effectiveness in reaching all intended beneficiaries.

In terms of awareness and inclusion, the study revealed that 68% of respondents were aware of FISP procedures and eligibility requirements, while 32% reported limited or no awareness of how to access the programme. Awareness levels were strongly linked to participation, as farmers who were well-informed were more likely to register and benefit from the programme. This finding aligns with FAO (2021) [10], which emphasizes that effective agricultural support programmes depend heavily on information dissemination and farmer sensitisation to ensure equitable participation.

The categorisation of beneficiaries further revealed disparities in participation levels. The study found that 58% of respondents were active beneficiaries receiving inputs in the most recent farming season, while 27% were inactive beneficiaries who had registered but did not receive inputs consistently, and 15% were non-participants entirely excluded from the programme. This distribution highlights a tiered participation structure, where access to benefits is not uniform even among registered farmers. Similar observations are made by Jayne *et al*. (2018), who argue that input subsidy programmes in Sub-Saharan Africa often face challenges of inconsistent beneficiary targeting and partial coverage.

Several factors were identified as influencing participation levels in FISP. The most prominent factor was administrative and digital access, particularly the use of the e-FISP system. The findings showed that 59% of respondents experienced difficulties navigating the registration process, especially due to limited digital literacy and lack of access to mobile technologies. Additionally, 46% of respondents indicated that distance to registration centres affected their ability to enrol, while 41% cited lack of timely information as a barrier to participation. Socio-economic constraints also played a role, as poorer households were less likely to maintain consistent participation due to inability to meet complementary farming costs.

Overall, the findings demonstrate that while FISP has achieved moderate success in promoting farmer participation in Kanakantapa Ward, significant challenges remain. These include gaps in awareness, digital exclusion, and administrative barriers, which collectively limit full inclusion. The study therefore concludes that improving outreach, strengthening extension services, and simplifying registration processes would enhance participation levels and ensure more equitable access to agricultural support.

4.5.2 Influence of FISP on crop yields and agricultural productivity

The study examined the influence of the Farmer Input Support Programme (FISP) on crop yields and overall agricultural productivity among small-scale farmers in Kanakantapa Ward. The findings indicate that FISP has contributed to improvements in yields, although the extent of impact varies among households due to differences in input adequacy, timing, and utilisation levels.

Changes in crop yields after FISP participation

The results show that 54% of respondents experienced an increase in crop yields after participating in FISP, while 31% reported no significant change, and 15% indicated a decline in yields despite participation. The increase in yields among more than half of the farmers suggests that FISP has a generally positive effect on agricultural productivity when inputs are properly utilised. However, the presence of farmers who experienced no improvement or declining yields indicates that programme effectiveness is not uniform across beneficiaries.

Comparison of yields before and after FISP support

When comparing yields before and after FISP participation, the study found that 47% of respondents reported moderate yield improvements, while 29% experienced substantial improvements, and 24% reported little or no difference in production levels. This suggests that although FISP contributes to productivity gains, the magnitude of improvement is often moderate rather than transformative. The limited improvement is largely associated with delayed input delivery and insufficient quantities provided to farmers.

Contribution of inputs (fertiliser and seed) to productivity

The study revealed that fertiliser and improved seed varieties provided under FISP played a critical role in enhancing productivity. Specifically, 61% of respondents attributed improved yields primarily to fertiliser use, while 52% credited improved seed varieties for better crop performance, and 38% reported that both inputs combined contributed to yield increases. These findings demonstrate that inputs provided under FISP are essential production drivers, consistent with Mason *et al*. (2013), who emphasize that fertiliser and improved seed adoption significantly increase maize and staple crop yields in Zambia when used appropriately.

Relationship between input use and output levels

The study established a positive but moderate relationship between input use and output levels. It was found that 56% of farmers who fully utilised fertiliser and seed inputs achieved higher yields, while 33% who used inputs partially experienced only marginal gains, and 11% who misused or insufficiently applied inputs recorded poor yields. This indicates that productivity is strongly dependent not only on access to inputs but also on correct application and adequate quantities. Jayne *et al*. (2018) similarly argue that input subsidy programmes yield better results when farmers have sufficient quantities and proper agronomic knowledge.

Productivity differences among beneficiary farmers

The findings further revealed significant productivity differences among FISP beneficiaries. Approximately 38% of respondents were classified as high-yield farmers, 44% as medium-yield farmers, and 18% as low-yield farmers despite receiving inputs. These differences were influenced

by factors such as land size, timing of input receipt, and access to extension services. Farmers who received inputs early and had better agronomic support consistently achieved higher productivity compared to those who received inputs late or in inadequate quantities.

Overall, the findings suggest that FISP has a positive but uneven impact on crop yields and agricultural productivity in Kanakantapa Ward. While the programme contributes to yield improvements for many farmers, its effectiveness is constrained by input inadequacy, delayed distribution, and variations in farmer capacity. These findings align with FAO (2021) [10], which notes that input support programmes are most effective when combined with timely delivery, adequate quantities, and strong extension support services.

4.5.3 Adequacy and timeliness of agricultural inputs

The study assessed the adequacy and timeliness of agricultural inputs provided under the Farmer Input Support Programme (FISP) in Kanakantapa Ward, focusing on sufficiency of fertiliser and seed allocations, timing of distribution relative to the planting season, effects of delays on crop performance, and input-to-land ratio challenges. The findings reveal that both adequacy and timing remain critical constraints limiting the effectiveness of the programme in improving agricultural productivity.

Regarding the sufficiency of fertiliser and seed allocations, the study found that 66% of respondents considered the inputs received to be insufficient for their full cultivated land, while only 22% reported that the inputs were adequate, and 12% indicated that the allocation was fairly sufficient but still limiting for optimal production. This suggests that most farmers are unable to fully apply recommended input levels across their entire fields, resulting in sub-optimal productivity. Similar observations are made by Jayne *et al*. (2018), who note that input subsidy programmes in Sub-Saharan Africa often distribute inputs in quantities that are too small to achieve maximum yield potential.

In terms of timing of input distribution relative to the planting season, the study revealed significant delays. The findings show that 72% of respondents received inputs late, after the recommended planting period, while 18% received inputs on time, and 10% reported inconsistent or unpredictable delivery schedules. The late delivery of inputs undermines farmers' ability to plant within the optimal agricultural calendar, reducing germination success and exposing crops to mid-season drought risks. FAO (2021) [10] emphasizes that timely input delivery is essential for ensuring that agricultural interventions translate into meaningful productivity gains.

The effects of these delays on crop performance were evident in the study results. Approximately 64% of respondents reported reduced yields due to late planting, while 24% experienced moderate yield losses, and only 12% indicated minimal impact due to delayed inputs. Farmers explained that late planting shortened the growing period, affected crop establishment, and reduced the effectiveness of fertiliser application. These findings are consistent with Mason *et al*. (2013), who highlight that delays in input distribution significantly reduce the returns on agricultural subsidy investments in Zambia.

The study also identified input-to-land ratio challenges as a major constraint affecting productivity. It was found that 59% of farmers cultivated land areas too large to be adequately supported by the quantity of inputs received, while only 27% had land sizes reasonably matched to input allocations, and 14% cultivated very small plots that were sufficiently covered by FISP inputs. This mismatch between land size and input allocation results in farmers either spreading inputs too thinly or leaving portions of land uncultivated. Consequently, productivity gains are diluted even among beneficiaries of the programme.

Overall, the findings demonstrate that although FISP provides essential agricultural inputs, its effectiveness in Kanakantapa Ward is significantly constrained by insufficient input quantities, delayed distribution, and mismatched input-to-land ratios. These challenges collectively reduce the programme's ability to achieve its intended objective of improving agricultural productivity among small-scale farmers.

4.5.4 Accessibility of FISP services and registration processes

The study examined the accessibility of Farmer Input Support Programme (FISP) services and registration processes in Kanakantapa Ward, focusing on the ease or difficulty of accessing registration, the role of the e-FISP system in participation, distance to registration and distribution centres, and digital literacy and inclusion challenges. The findings indicate that accessibility remains a major barrier affecting equitable participation in the programme.

Regarding the ease or difficulty of accessing FISP registration, the study found that 60% of respondents experienced difficulties during the registration process, while 25% reported that the process was manageable or relatively easy, and 15% indicated no direct involvement due to exclusion or lack of awareness. The difficulties reported included long queues, bureaucratic procedures, and lack of timely information. These challenges suggest that although FISP is widely implemented, access to enrolment remains uneven and administratively constrained. Similar observations are made by Chisanga and Ntombela (2020) [7], who argue that administrative complexity often limits participation in agricultural support programmes in rural areas.

The role of the e-FISP system in participation was also significant. The findings revealed that 57% of respondents acknowledged that e-FISP improved transparency in beneficiary selection, while 28% reported that it created additional barriers due to system failures or lack of support, and 15% were unsure of its overall impact. While the system is intended to modernise and streamline input distribution, its effectiveness is hindered by technical and infrastructural limitations. FAO (2021) [10] notes that digital agricultural systems can enhance efficiency but require strong institutional and technological support to function effectively in rural settings.

Distance to registration and distribution centres also emerged as a key constraint. The study found that 49% of respondents travelled long distances exceeding 10 kilometres to access registration or input distribution points, while 34% had moderately accessible centres within their locality, and 17% reported very close access to services. The high transport costs and time required to access these services discouraged some farmers from participating fully in the programme. This finding highlights geographical inequality in service delivery, which limits inclusivity and programme reach.

Digital literacy and inclusion challenges further affected access to FISP services. The study revealed that 65% of

respondents had low digital literacy levels, particularly in using mobile phones and navigating the e-FISP system, while 22% had moderate digital skills, and only 13% were fully capable of independently completing registration processes. As a result, many farmers depended on extension officers or community leaders for assistance. This dependence created delays and sometimes exclusion when assistance was unavailable. Chisanga and Ntombela (2020) [7] similarly argue that digital transformation in agricultural subsidy systems often disadvantages older and less educated rural farmers due to limited ICT skills.

Overall, the findings demonstrate that accessibility to FISP services in Kanakantapa Ward is constrained by procedural difficulties, digital system limitations, geographical distance, and low digital literacy levels. These challenges collectively reduce participation and undermine the effectiveness of the programme in achieving inclusive agricultural development.

4.5.5 Limitations and challenges in benefiting from FISP

The study examined the limitations and challenges faced by small-scale farmers in benefiting from the Farmer Input Support Programme (FISP) in Kanakantapa Ward, with a focus on administrative and logistical constraints, corruption and transparency concerns, bureaucratic delays, and system inefficiencies associated with the e-FISP platform. The findings reveal that despite the programme's intended benefits, several structural and operational challenges continue to reduce its overall effectiveness.

Regarding administrative and logistical constraints, the study found that 63% of respondents experienced difficulties related to input distribution logistics and administrative procedures, while 24% reported minimal challenges, and only 13% indicated smooth administrative processes. Farmers highlighted issues such as poor coordination between agricultural offices, inadequate transport arrangements, and inconsistent communication regarding input availability. These challenges disrupted timely delivery and reduced farmer confidence in the programme. Similar findings are supported by Jayne *et al*. (2018), who note that input subsidy programmes in Sub-Saharan Africa often suffer from weak logistical systems that hinder efficient service delivery.

Corruption and transparency concerns also emerged as a significant issue affecting trust in FISP implementation. The findings revealed that 46% of respondents believed that there were instances of unfair beneficiary selection or favoritism, while 33% disagreed with claims of corruption, and 21% were uncertain. These perceptions suggest that although reforms such as e-FISP were introduced to improve accountability, concerns about fairness still persist among beneficiaries. Mason *et al*. (2013) argue that perceived or actual corruption in subsidy programmes reduces trust and weakens the effectiveness of agricultural support interventions.

Bureaucratic delays were another major challenge identified in the study. The results showed that 68% of respondents experienced delays in input allocation and approval processes, while 22% reported occasional delays, and only 10% indicated timely processing of their input entitlements. These delays were attributed to lengthy verification procedures, administrative bottlenecks, and slow coordination between district and local agricultural offices. The delays often resulted in farmers receiving inputs after the optimal planting period, thereby reducing productivity outcomes. FAO (2021) [10] emphasizes that bureaucratic inefficiencies in agricultural programmes significantly undermine timely agricultural interventions and reduce their impact on food security.

System inefficiencies related to the e-FISP platform were also highlighted as a key constraint. The study found that 61% of respondents experienced technical challenges such as system downtime, network failures, and difficulties in accessing the platform, while 26% reported stable system functionality, and 13% had no direct interaction with the system due to reliance on intermediaries. These inefficiencies often delayed registration and verification processes, leading to exclusion or late inclusion of eligible farmers. Chisanga and Ntombela (2020) [7] observe that while digitalisation improves transparency in theory, weak ICT infrastructure and limited rural connectivity often reduce system effectiveness in practice.

Overall, the findings demonstrate that the effectiveness of FISP in Kanakantapa Ward is significantly constrained by administrative inefficiencies, perceived corruption, bureaucratic delays, and technological system failures. These challenges collectively reduce efficiency, weaken trust in the programme, and limit its ability to achieve its intended objective of improving agricultural productivity among small-scale farmers.

4.5.6 Socio-economic constraints affecting FISP effectiveness

The study examined the socio-economic constraints affecting the effectiveness of the Farmer Input Support Programme (FISP) in Kanakantapa Ward, with particular focus on poverty and inability to complement inputs, labour shortages and household capacity, land size limitations, and market access challenges. The findings indicate that socio-economic conditions significantly influence how farmers benefit from the programme and ultimately determine productivity outcomes.

Regarding poverty and the inability to complement inputs, the study found that 64% of respondents lacked sufficient financial resources to purchase additional fertiliser, seed, or agricultural inputs beyond what was provided under FISP, while 24% had moderate financial capacity, and only 12% were able to effectively complement subsidised inputs with personal investments. This indicates that most farmers depend heavily on FISP allocations, which are often insufficient for optimal production. These findings align with Scoones (2015), who emphasizes that livelihood assets such as financial capital are critical in determining agricultural performance and resilience.

Labour shortages and household capacity were also identified as major constraints. The results showed that 57% of respondents experienced inadequate household labour during peak farming periods, while 29% had moderate labour availability, and only 14% reported sufficient labour for all farming activities. Farmers indicated that migration of young family members to urban areas and engagement in non-farm activities reduced available labour for agricultural production. This labour constraint negatively affected timely land preparation, weeding, and harvesting, thereby reducing productivity.

In terms of land size limitations, the study revealed that 53% of respondents operated on small land holdings of less than 2 hectares, while 34% cultivated medium-sized plots between 2 and 5 hectares, and only 13% had large-scale plots above 5 hectares. Small land sizes limited the scale of

production even when inputs were available, reducing the potential impact of FISP. These findings suggest that land fragmentation remains a structural barrier to agricultural transformation in the study area. Jayne *et al*. (2018) similarly note that land constraints in Sub-Saharan Africa significantly limit the effectiveness of input subsidy programmes.

Market access challenges were also found to affect the overall benefits derived from FISP. The study found that 61% of respondents faced difficulties accessing reliable and profitable markets for their agricultural produce, while 27% reported moderate access to local markets, and only 12% had strong access to stable and competitive markets. Farmers reported low farm-gate prices, lack of transport, and poor market information systems as key barriers. These constraints reduced incentives for increased production, as farmers were unable to translate productivity gains into meaningful income improvements. FAO (2021) [10] highlights that without effective market access, agricultural productivity gains may not translate into improved household food security or livelihoods.

Overall, the findings demonstrate that socio-economic constraints significantly limit the effectiveness of FISP in Kanakantapa Ward. Factors such as poverty, labour shortages, small land sizes, and weak market access collectively reduce farmers' ability to fully benefit from the seffectiveness requires not only input provision but also broader rural development interventions that address structural socio-economic barriers.

4.5.7 Farmers' perceptions of the overall effectiveness of FISP

The study assessed farmers' perceptions of the overall effectiveness of the Farmer Input Support Programme (FISP) in Kanakantapa Ward, focusing on satisfaction levels among beneficiaries, perceived strengths of the programme, perceived weaknesses and gaps, and suggestions for improvement. The findings reveal mixed perceptions, reflecting both appreciation of the programme's role in supporting agricultural production and dissatisfaction with its implementation challenges.

Regarding satisfaction levels among beneficiaries, the study found that 51% of respondents were moderately satisfied with FISP, while 27% reported high satisfaction, and 22% expressed dissatisfaction with the programme. This indicates that although the majority of farmers recognize some benefits from FISP, a significant proportion remain unconvinced about its effectiveness in fully addressing their agricultural needs. These findings suggest that satisfaction is closely linked to the reliability, timeliness, and adequacy of inputs received.

In terms of perceived strengths of the programme, the study revealed that 66% of respondents appreciated FISP for improving access to fertiliser and improved seed, while 48% highlighted its role in reducing input costs for small-scale farmers, and 35% acknowledged that it contributed to improved yields in some farming seasons. These findings demonstrate that FISP remains an important agricultural support mechanism, particularly for resource-constrained households. Similar observations are made by Mason *et al*. (2013), who note that input subsidy programmes in Zambia have played a significant role in increasing access to key agricultural inputs among smallholder farmers.

However, the study also identified several perceived weaknesses and gaps in the programme. The findings showed that 62% of respondents cited delays in input distribution as a major weakness, while 55% pointed to inadequate input quantities, and 43% expressed concerns about inefficiencies in the e-FISP system and beneficiary selection processes. Additionally, 38% of respondents felt that the programme was not equitably distributed, suggesting perceived inequalities in access. These weaknesses undermine farmer confidence and reduce the overall effectiveness of the programme. Jayne *et al*. (2018) similarly argue that input subsidy programmes often face challenges related to targeting inefficiencies and operational delays, which reduce their impact.

Regarding suggestions for improvement, farmers proposed several key measures to enhance the effectiveness of FISP. The study found that 61% of respondents recommended timely delivery of inputs before the planting season, while 52% suggested increasing the quantity of inputs allocated per farmer, and 44% called for improvements in transparency and fairness in beneficiary selection. Furthermore, 37% recommended strengthening extension services and farmer training, particularly in relation to the use of inputs and digital registration systems. These suggestions highlight the need for both operational and structural reforms to improve programme effectiveness.

Overall, the findings indicate that while FISP is valued by farmers in Kanakantapa Ward for its contribution to agricultural support, its effectiveness is limited by implementation challenges. Improving timeliness, input adequacy, transparency, and farmer support services would significantly enhance beneficiary satisfaction and strengthen the overall impact of the programme on agricultural productivity.

5. Conclusions and Recommendations

5.1 Overview

This chapter presents the summary of key findings, conclusions, and recommendations on FISP effectiveness, focusing on participation, agricultural productivity, and challenges faced by small-scale farmers, alongside measures to improve programme implementation.

5.2 Conclusion

The study examined the effectiveness of the Farmer Input Support Programme (FISP) in improving agricultural productivity among small-scale farmers in Kanakantapa Ward, Chongwe District. The overall findings indicate that FISP has made a moderate but inconsistent contribution to improving agricultural productivity, largely due to implementation challenges, input constraints, and socio-economic limitations affecting farmers.

The study established that participation in FISP is relatively high, with 62% of respondents being active beneficiaries, while 38% were either inactive or excluded from the programme. This indicates that although the programme has expanded access to agricultural inputs, it has not achieved full inclusivity in the study area. Awareness and accessibility challenges, particularly related to the e-FISP system, continue to limit equitable participation among small-scale farmers.

In terms of productivity, the findings show that 54% of respondents experienced an increase in crop yields after receiving FISP inputs, demonstrating that the programme has a positive influence on agricultural output when effectively accessed and utilized. However, 31% reported no

significant change in yields, while 15% experienced reduced yields, mainly due to late input distribution and insufficient quantities. Furthermore, 67% of farmers indicated that the fertiliser and seed allocations were inadequate for their land size, which significantly limited potential productivity gains. The study also found that 72% of respondents received inputs after the optimal planting period, which negatively affected crop establishment and final yields. This highlights that timeliness is a critical factor influencing the success of FISP. Additionally, 61% of respondents reported inefficiencies in input distribution systems, while 60% experienced difficulties in accessing registration services, indicating persistent administrative and logistical challenges.

Socio-economic constraints further limited the effectiveness of the programme. The findings revealed that 64% of farmers lacked sufficient financial capacity to complement FISP inputs, while 53% operated on small land holdings below 2 hectares, and 57% experienced labour shortages during peak farming periods. These structural challenges reduced farmers' ability to fully benefit from the programme, even when inputs were provided.

Overall, the study concludes that while FISP plays a significant role in improving access to agricultural inputs and enhancing productivity for some farmers, its effectiveness in Kanakantapa Ward is constrained by input inadequacy, delayed distribution, accessibility barriers, digital system challenges, and socio-economic limitations. As a result, the programme achieves only partial success in its objective of sustainably improving agricultural productivity among small-scale farmers.

5.3 Recommendations

Based on the findings of the study, several recommendations are made to improve the effectiveness of the Farmer Input Support Programme (FISP) in Kanakantapa Ward, Chongwe District. First, the relevant authorities should ensure timely distribution of agricultural inputs so that fertiliser and seed reach farmers before the onset of the planting season, as delays were found to significantly reduce crop yields and overall productivity. Secondly, the government should increase the quantity of inputs allocated per farmer to better match landholding sizes and production needs, since most farmers reported receiving insufficient inputs that limited productivity gains. In addition, there is a need to strengthen the e-FISP system by improving digital infrastructure and providing training to enhance farmers' digital literacy, as many respondents faced challenges related to system access, poor network connectivity, and lack of technical support. Furthermore, transparency and accountability in beneficiary selection should be improved through stronger monitoring mechanisms to reduce perceptions of corruption and exclusion and to ensure fair distribution of inputs. Agricultural extension services should also be strengthened to support farmers in registration processes, proper use of inputs, and improved farming practices, thereby enhancing productivity and programme uptake. Finally, FISP should be complemented with broader rural development interventions such as improved access to markets, irrigation infrastructure, and livelihood diversification programmes in order to address underlying socio-economic constraints like poverty, small land sizes, and market barriers, and ultimately improve agricultural productivity and household food security.

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