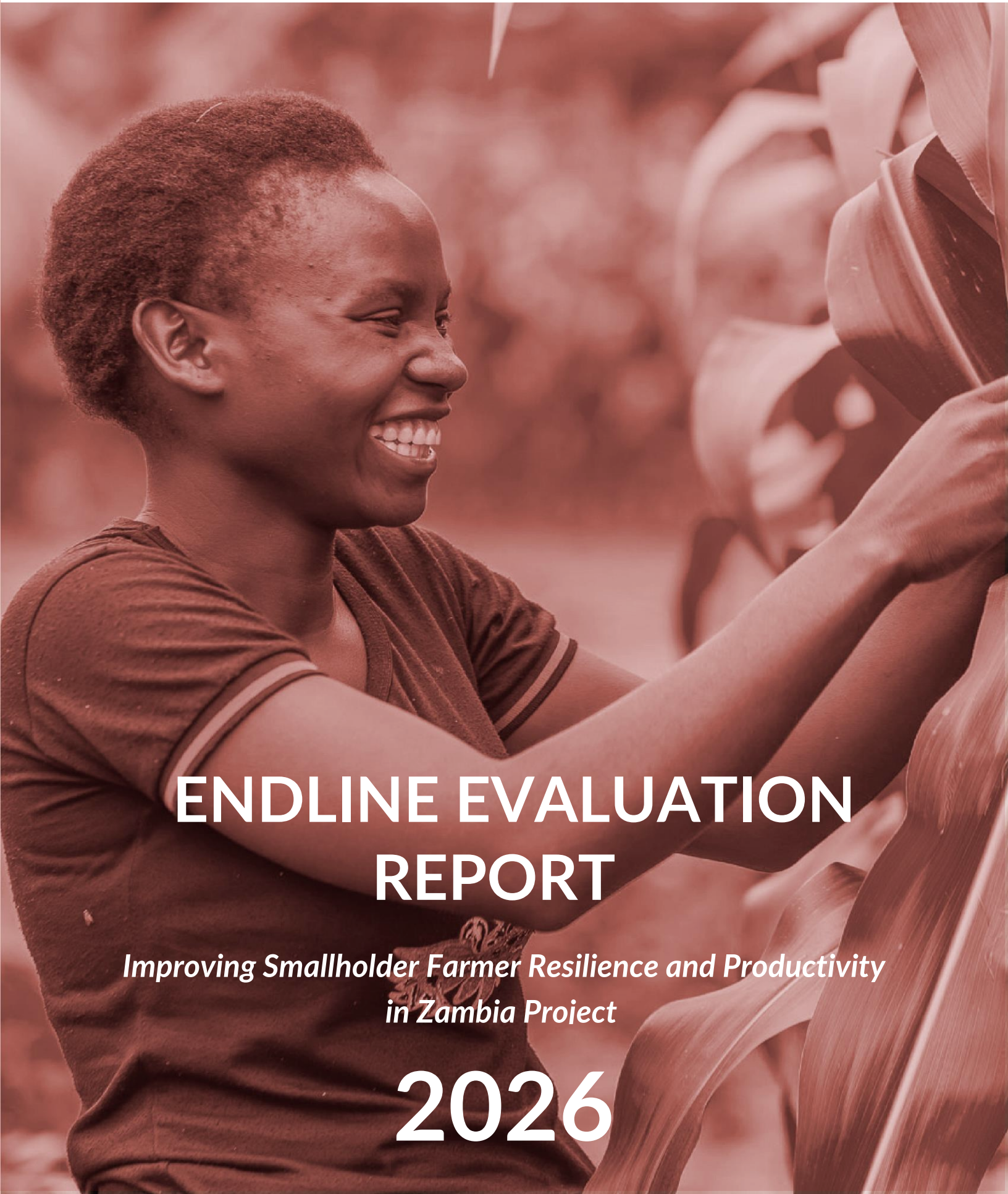

ENDLINE EVALUATION REPORT

Improving Smallholder Farmer Resilience and Productivity in Zambia Project

2026

About FSD Zambia Zambian

Financial Sector Deepening Limited (FSD Zambia) is a Zambian organisation working closely with key players throughout the economy to ensure that all Zambians are financially healthy, particularly the most excluded and underserved. We help rural families, women, youth, low-income people, and other households in Zambia to understand and access a wide range of sustainable, comparable and affordable financial services. To expand financial inclusion, we collaborate with both public and private sector institutions to make financial markets work better. FSD Zambia enhances trust between clients and suppliers of financial services by increasing their understanding, expanding innovation, and lowering costs. FSD Zambia enjoys the active support of financing partners UK Aid, Swedish Sida, Comic Relief/Jersey Overseas Aid and Rural Finance Expansion Programme (RUFEP). More information is available on our website, www.fsdzambia.org

Author: Analytics

Acknowledgements: Financial Sector Deepening Zambia Limited (FSD Zambia) acknowledges significant contributions from Lillian Chilongo Kangwa, Testify Shampongo and Edwin Sikaitwa

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EXECUTIVE SUMMARY

The Improving Smallholder Farmer Resilience and Productivity in Zambia Project, implemented by FSD Zambia with support from Jersey Overseas Aid (JOA), aimed to expand access to agricultural insurance and strengthen the resilience of smallholder farmers against climate-related risks. The project focused on improving awareness, access, and use of crop and livestock insurance products while strengthening the supporting market systems, including digital payment channels and partnerships with insurers and agricultural market actors.

This endline evaluation assessed the extent to which the project achieved its intended outcomes. The evaluation examined farmers' socio-economic characteristics, uptake and use of agricultural insurance products, awareness and understanding of insurance, and the extent to which the intervention contributed to improved resilience and financial inclusion. A mixed-methods approach was used, combining quantitative household surveys with qualitative interviews and focus group discussions. A total sample of 500 participants was interviewed, consisting of 250 crop insurance clients and 250 farmers who had received awareness on livestock insurance products.

The findings show that the project successfully reached smallholder farmers with insurance information. Overall, 94 percent of participants reported receiving information about crop or livestock insurance. Community meetings were the most effective dissemination channel, reaching 72 percent of farmers, followed by trainings and workshops. Radio, demonstration sessions, and extension officers played a smaller role in information dissemination.

The evaluation also found that farmers generally have a good level of understanding of insurance. Overall, 62 percent of participants rated their understanding of insurance as good or very good, which is considerably higher than typical national levels of financial product understanding among smallholder farmers. Knowledge was strongest for topics directly related to the type of insurance farmers were exposed to, although some gaps remained regarding claims procedures and payout timelines.

Adoption patterns differed significantly between crop and livestock insurance. Crop insurance recorded very high uptake, with 98 percent of farmers who received information reporting that they had insured their crops. In contrast, livestock insurance uptake was very low, with only 2 percent of farmers purchasing the product. The main barriers to adoption of livestock insurance included lack of trust in insurance companies, perceived high premiums, and limited understanding of the product.

The evaluation also provides early evidence that the intervention contributed to strengthening farmers' resilience to climate-related shocks. Many farmers reported improved preparedness for climate risks, including saving for climate-related shocks and reducing reliance on distress coping strategies such as selling household assets during disasters. The results also indicate

improvements in financial awareness and increased use of digital financial services for insurance transactions.

At market systems level, the project contributed to the development and institutionalisation of inclusive agricultural insurance products within Zambia's insurance sector. Partnerships with insurers, agro-dealers, mobile network operators, and other market actors helped strengthen the delivery ecosystem for agricultural insurance. However, operational challenges were also identified, including delays in claims processing, digital platform functionality issues, and affordability concerns for livestock insurance.

Overall, the project made important progress in expanding access to agricultural insurance and strengthening the foundations for inclusive agricultural risk management among smallholder farmers. While some outcomes, particularly long-term income effects, will require continued monitoring, the findings indicate that the intervention has improved awareness, encouraged risk management behaviours, and supported the development of sustainable agricultural insurance markets.

Based on the evaluation findings, the study recommends strengthening claims management and communication by insurance providers, reviewing livestock insurance pricing structures to improve affordability, improving the functionality of digital insurance platforms, and expanding financial literacy and trust-building initiatives among farmers. Continued collaboration amongst insurers, government, and agricultural market actors will be essential to scale agricultural insurance and ensure that smallholder farmers can effectively manage climate-related risks.

INTRODUCTION

Since 2014, FSD Zambia has been implementing interventions aimed at strengthening the resilience and productivity of smallholder farmers across Zambia. The initial phase concentrated on piloting parametric insurance solutions through selected agricultural aggregators and the Farmer Input Support Programme (FISP), supported by feasibility studies funded by the Foreign, Commonwealth and Development Office (FCDO). Building on these insights, FSD Zambia later conceptualized a broader initiative to extend insurance access beyond FISP beneficiaries. This led to the development of two flagship interventions, namely the Inclusive Crop Insurance Scheme (ICIS) and the Inclusive Livestock Insurance Pilot (ILIP), both supported by Jersey Overseas Aid (JOA).

The objective of this project was to improve and increase access to high-value and comprehensive agricultural insurance products and to strengthen climate resilience for 3,000[1] smallholder farmers in Zambia by June 2025, particularly those growing crops and rearing cattle.

The project used an affordable and sustainable insurance portfolio for crops and cattle that reached well-informed smallholder farmers nationwide and covered a wide range of agricultural risks. It prioritised integrated disaster risk management approaches that supported prevention and early action aimed at addressing the drivers of risk, especially caused by climate change. It was expected that, through the implementation of comprehensive agricultural insurance products, the economy would transition from a culture of providing ad hoc, ex-post support to smallholder farmers following major production shocks toward a pre-planned and budgeted, ex-ante agricultural insurance system for managing and mitigating risks. This shift was expected to smooth consumption and enhance sustainable, more predictable livelihoods for smallholder farmers.

The key outcomes of the project were:

- Smallholder farmers have increased access and usage of digital platforms (mobile money) for insurance payments.
- Smallholder farmers have increased access and expanded use of production and market information (digital and media) on crop and livestock insurance products to make informed decisions on the uptake of the insurance products.
- Smallholder farmers have increased access to and usage of crop and livestock insurance products as a coping strategy for climate change-related risks.

The outputs that were expected to contribute to systemic change included:

- Improved design and delivery of resilient climate-smart agriculture insurance (crops and livestock) with smart subsidies for smallholder farmers.

[1] The figure was revised from 100,000 smallholder farmers

- Improved access to market information for smallholders and households to support informed agricultural insurance decisions and uptake.
- Responsive digital administration platforms available to insurance market actors, while increased use of mobile phones and mobile money support information sharing, premium payments, and claims processing, reducing product costs for smallholder farmers.

With the project now completed, FSD Zambia, with the support of external consultants, conducted a comprehensive endline evaluation to assess the programme's overall performance and validate its outcomes. The evaluation assessed the effectiveness of interventions and captured clients' experiences, providing evidence of the program's real sector impact. This report presents key findings of the study and highlights lessons learned to inform future programming.

Description of Assignment

The main objective of this endline evaluation was to collect, validate, and analyse data on all indicators used to track progress throughout the project cycle. The evaluation measured the performance and effectiveness of project interventions and assessed whether the expected outcomes were achieved.

The assessment evaluated smallholder farmers' resilience by analyzing their income levels, level of understanding of microinsurance, and uptake of insurance services. It further assessed access to and use of digital platforms such as mobile money for insurance payments, access to crop and livestock production and market information through digital and media channels to support informed decision making, and the extent to which crop and livestock insurance products are used as a coping mechanism against climate related risks.

The specific objectives of the assignment as outlined by the TORs were:

1. Examine the demographic, social, and economic profiles of participants and assess how these factors relate to the project's core outcome indicators.
2. Measure the extent to which smallholder farmers increased access to and usage of crop and livestock insurance products as a coping strategy for climate-related risks.
3. Assess how the uptake of micro-insurance services has strengthened household resilience
4. Assess the extent to which smallholder farmers increased access and usage of digital platforms (mobile money) for insurance payments.
5. Identify opportunities, constraints, and lessons learned to inform future programming

METHOOLOGY

Evaluation Design

The endline evaluation used a mixed-methods approach, combining quantitative and qualitative methods to provide a comprehensive assessment of project outcomes. This approach enabled the evaluation team to measure progress against key indicators and determine the extent to which smallholder resilience has improved.

Study Population and Sampling

The target population for this assessment consisted of clients under the FSD Zambia Inclusive Insurance thematic area, specifically those who benefited from the Improving Resilience and Productivity of Smallholder Farmers in Zambia Project. A total sample of 500 Respondentswas determined using the EPI sampling calculator, The sample consisted of 250 crop insurance clients and 250 farmers who had received awareness on livestock insurance.

The inclusion criteria required that respondents participated in the insurance interventions or had received awareness on crop or livestock insurance products for at least one year, including some whose participation or exposure had ended within the past year. Respondents were grouped into clusters, and Simple Random Sampling was used to select individuals from each cluster. Sample selection followed the method developed by Kevin M. Sullivan, using the OpenEpi toolkit for proportional sampling.

Survey data was collected through Computer Assisted Personal Interviews (CAPI) during face-to-face interviews. Data was captured on electronic tablets using the KoBoCollect software application, a free open-source mobile data collection tool available on Android devices via the Google Play Store.

Quality assurance

To guarantee high quality data, enumerators who possessed at least a university degree and demonstrated experience in research as well as monitoring and evaluation were recruited and adequately trained prior to the survey to ensure a thorough understanding of the research instruments. The use of Computer Assisted Personal Interviewing (CAPI) for quantitative data collection enabled the research team to continuously monitor submissions and check for completeness and consistency in real time. In addition, the research team maintained regular follow up with team leaders and enumerators throughout the data collection period to uphold FSD Zambia's standards on data integrity and to ensure that the information collected accurately reflected the experiences of end clients.

Data processing and analysis

Quantitative data from surveys was analysed using statistical software (SPSS) to perform descriptive statistics, correlation analysis, and regression modelling, while qualitative data from interviews and focus group discussions was analysed using thematic analysis to uncover underlying themes and narratives.

EVALUATION RESULTS

Characteristics of Study Participants

Smallholder farmers were the primary respondents in this survey. Understanding their socio-economic and demographic characteristics was essential for interpreting the evaluation findings and contextualising project outcomes. This section presents key background information of the respondents, including sex, age, education level, household composition, income sources, and farming activities. These characteristics provide important insights that help explain variations in levels of resilience observed across the study population.

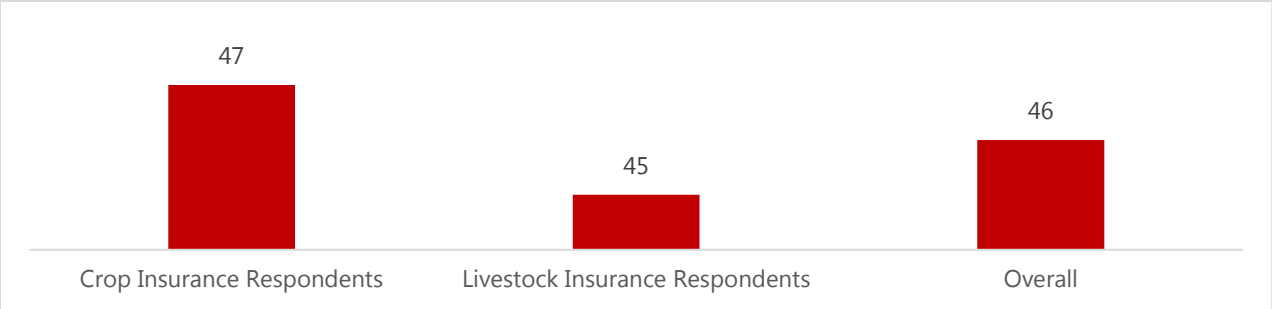
Social Demographic

The distribution of survey participants by type of insurance indicates a higher representation of smallholder farmers enrolled in crop insurance compared to livestock insurance. Across both insurance categories, participation was relatively balanced by sex, with a slight predominance of female Respondents.

The sex distribution of respondents shows a slightly higher participation of female smallholder farmers across both insurance categories. Among crop insurance participants, females accounted for 55 percent compared to 45 percent males. Similarly, females constituted 52 percent of livestock insurance respondents, while males represented 48 percent. Overall, females made up 55 percent of the total sample, compared to 46 percent males.

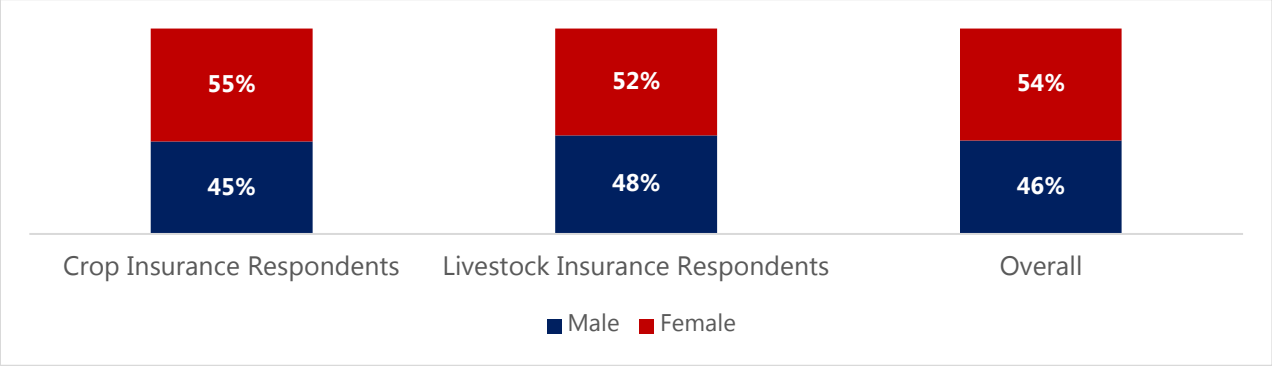
Although women appeared as the majority of respondents, feedback from the qualitative interviews revealed that a large proportion of married female participants, nearly 70 percent, reported that they were responding on behalf of their spouses.

Figure 1: Sex distributions of smallholder farmers (%)



The mean age of respondents across the survey was 46 years, indicating that the study largely captured economically active smallholder farmers. Crop insurance respondents had a slightly higher mean age of 47 years compared to livestock insurance, whose mean age was 45 years. Overall, the age distribution suggests that both crop and livestock insurance interventions primarily engaged farmers with substantial farming experience, which is relevant for understanding insurance uptake, risk perception, and decision-making behaviour.

Figure 2: Average age of smallholder farmers (Years)



Most respondents had attained primary education (41 percent) or junior secondary education (27 percent), indicating generally low to moderate levels of formal education among the study population. About 22 percent had completed senior secondary education, while only 7 percent had attained tertiary education. A small proportion, 3 percent, reported having never been to school. Overall, livestock insurance respondents tended to have relatively higher education levels than crop insurance Respondents, which may influence awareness, understanding, and uptake of insurance products.

Table 1: Education attainment (%)

Highest Level of Education Completed	Crop Insurance Respondents (%)	Livestock Insurance Respondents (%)	Overall (%)
Never been to school	7	0	3
Primary (Grade 1–7)	52	32	41
Junior Secondary (Grade 8–9)	27	27	27
Senior Secondary (Grade 10–12)	13	29	22
Tertiary	1	12	7

Income and Expenditure

Farming is the main source of income for most participants (78 percent overall), particularly among crop insurance clients (94 percent) compared to livestock insurance clients (64 percent). Livestock rearing is reported only among livestock insurance clients (21 percent). Business activities are more common among livestock insurance clients (14 percent) than among crop

insurance clients (4 percent), while employment and casual labour each account for about 1 percent, indicating that livelihoods are predominantly agriculture-based.

Table 2: Main source of income/livelihoods (%)

Main Source of Income	Crop Insurance (%)	Livestock Insurance (%)	Overall (%)
Employment	1	0	1
Business	4	14	10
Farming	94	64	78
Livestock rearing	0	21	12
Casual labour	0	1	1

Livestock insurance clients have higher average income and expenditure than crop insurance clients. The average income among livestock insurance clients is ZMW 2,458, compared to ZMW 1,417 among crop insurance clients. Similarly, average expenditure is higher among livestock insurance clients (ZMW 1,705) than among crop insurance clients (ZMW 1,183). Overall, the sample reports an average income of ZMW 1,984 and an average expenditure of ZMW 1,442.5, indicating that income slightly exceeds expenditure across the two categories. This positive income-expenditure balance suggests relatively improved financial management among respondents.

In comparison, findings from the FSD Zambia 2023 Annual Impact Assessment showed that the average monthly income among respondents was ZMW 1,456, while average expenditure was ZMW 1,989, indicating that many households were living beyond their means. These earlier findings prompted FSD Zambia to re-strategise its financial education initiatives to promote improved financial management and resilience among beneficiaries. The improved income-expenditure pattern observed among respondents may therefore reflect the influence of these strengthened financial education efforts.

Table 3: Average monthly income and expenditure (ZMW)

Category	Crop Insurance (ZMW)	Livestock Insurance (ZMW)	Overall (ZMW)
Average Income	1417	2458	1984
Average Expenditure	1183	1705	1,442.5

Poverty Probability Index

In this study, FSD Zambia used the Poverty Probability Index (PPI), a tool utilised by organisations and enterprises to evaluate the probability that a household falls below the poverty threshold. It is engineered to be statistically robust while remaining user-friendly, rendering it advantageous for diverse applications. According to Innovation for Poverty Action (IPA)[2], the PPI is both statistically robust and user-friendly. The PPI tool is founded on a standardised set of 10 questions that are benchmarked against a country's poverty metrics. Individuals are categorised into five quintiles based on their PPI score: PPI 1 (Poorest), PPI 2 (Poor), PPI 3 (Middle), PPI 4 (Rich), and PPI 5 (Richest). PPI is an essential instrument for understanding and tackling poverty. Its clarity and precision render it an indispensable resource for organisations and enterprises such as FSD Zambia striving to enhance the lives of the financially underserved and unserved population who are most individuals in poverty in the country.

The distribution across PPI categories shows that most participants fall within the lower PPI bands, indicating generally low-income levels. Among crop insurance clients, the majority are concentrated in PPI 2 (62 percent) and PPI 1 (18 percent), with very few in the higher PPI categories. Livestock insurance clients appear relatively better off, with a smaller share in PPI 1 (13 percent) and a higher proportion in PPI 3 to PPI 5 (33 percent) compared to crop insurance clients (20 percent).

Overall, 74 percent of the sample falls within PPI 1 and PPI 2, confirming that the program is largely reaching poorer and more vulnerable households, while livestock insurance clients tend to be slightly better off economically than crop insurance clients.

Table 4: Poverty probability index (%)

Category	PPI 1	PPI 2	PPI 3	PPI 4	PPI 5
Crop Insurance	18	62	16.5	3	0.5
Livestock Insurance	13	54	23	7	3
Overall	16	58	20	5	2

Financial health

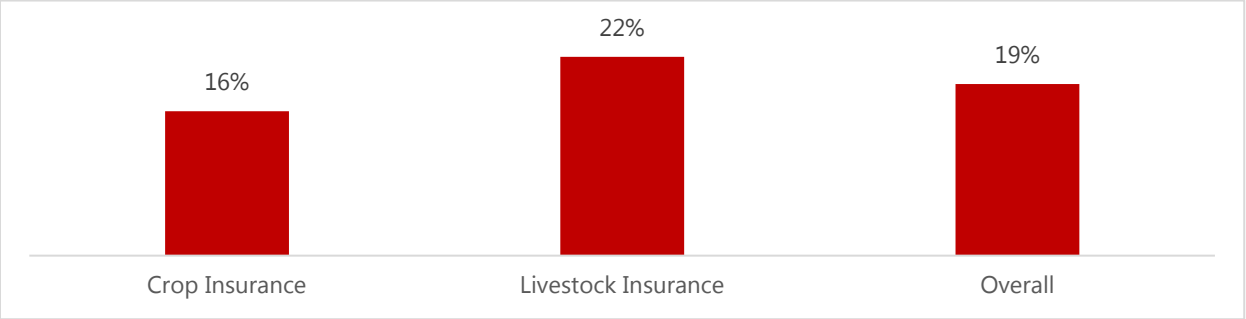
Financial health is an assessment of one's overall financial well-being. It involves more than mere monetary possession; it includes capacity to handle money judiciously, fulfil present and future financial commitments, and endure unforeseen financial disruptions. Several variables are evaluated in assessing financial health, including expenditure, savings, borrowing, and planning. This survey aimed to assess the financial health of SHFs in terms of their capacity to utilise financial services, handle everyday affairs, mitigate risks, and invest for the future. The study concentrated

[2] https://www.povertyindex.org/about-ppi

on three dimensions: capacity to handle daily finances, ability to mitigate risk, and capability to invest in livelihoods and the future.

The results show that 19 percent of the sample is financially healthy overall. Livestock insurance clients are more likely to be financially healthy (22 percent) compared to crop insurance clients (16 percent). This suggests that livestock insurance clients are relatively better off financially than crop insurance clients, although the overall level of financial health remains low across the sample.

Figure 3: Financially healthy adults (%)



INSURANCE UPTAKE

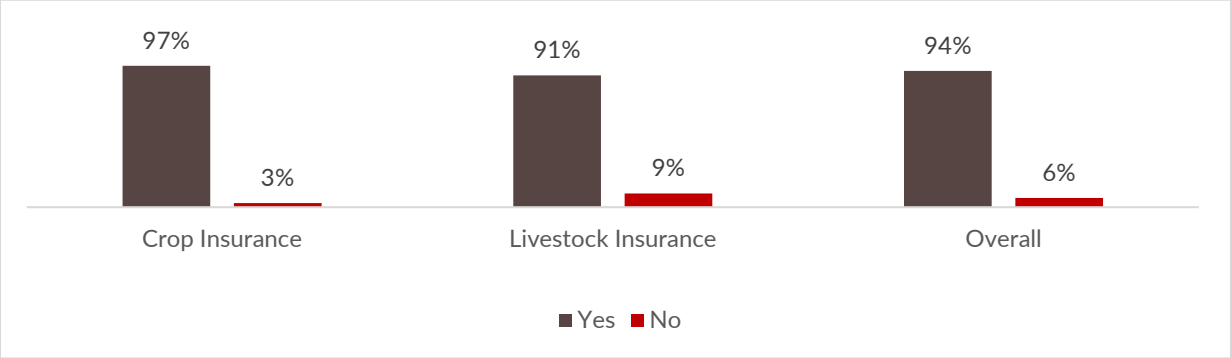
This section examines the uptake of agricultural insurance among the surveyed households, focusing on the extent of participation in crop and livestock insurance products and the factors influencing enrolment.

Insurance Awareness and Knowledge

This subsection assesses the extent to which respondents were reached by project awareness activities, the channels used to disseminate information, and the level of understanding and perception of agricultural insurance, including both crop and livestock insurance.

The results show that the project achieved very high outreach in disseminating insurance information. Overall, 94 percent of the sample reported receiving information about crop or livestock insurance. Coverage was slightly higher among crop insurance clients (97 percent) compared to livestock insurance clients (91 percent). Only a small proportion of participants (6.4 percent overall) reported that they did not receive any information. These findings indicate that the project's awareness and sensitisation activities successfully reached the vast majority of the targeted beneficiaries.

Figure 4: Proportion of Respondents who received insurance information

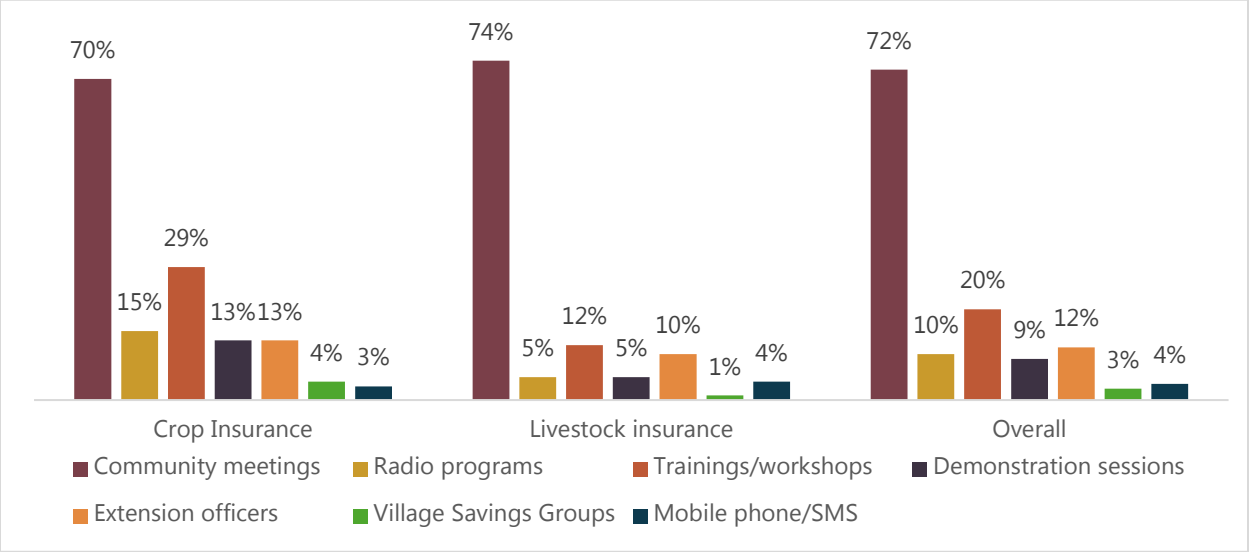


Regarding methods used to disseminate insurance information, the results show that community meetings were the main channel through which participants received information about insurance, reported by 72 percent of the sample overall (70 percent among crop insurance clients and 74 percent among livestock insurance clients). Training and workshops were the second most important channel, reported by 20 percent overall, though more common among crop insurance clients (29 percent) than livestock insurance clients (12 percent).

Radio programs played a more limited role, reaching 10 percent of the sample overall, while demonstration sessions and extension officers reached 9 percent and 12 percent of participants, respectively. Village Savings Groups and mobile phone or SMS were the least used channels, each reaching fewer than 5 percent of participants. Qualitative feedback further suggests that community-based engagement was perceived by most farmers as the most effective information dissemination channel, as it promoted higher attendance and enabled more farmers to be reached and exposed to the information.

These differences can partly be explained by implementation dynamics. The Inclusive Livestock Insurance Pilot experienced longer implementation delays compared to crop insurance activities, which likely constrained the consistency of awareness activities among livestock beneficiaries. In contrast, the Inclusive Crop Insurance Scheme benefited from implementation through two partners, which may have contributed to broader outreach, stronger awareness activities, and ultimately higher exposure of Respondentsto insurance information.

Figure 5: Sources of insurance information among Respondents (%)



Understanding how insurance works

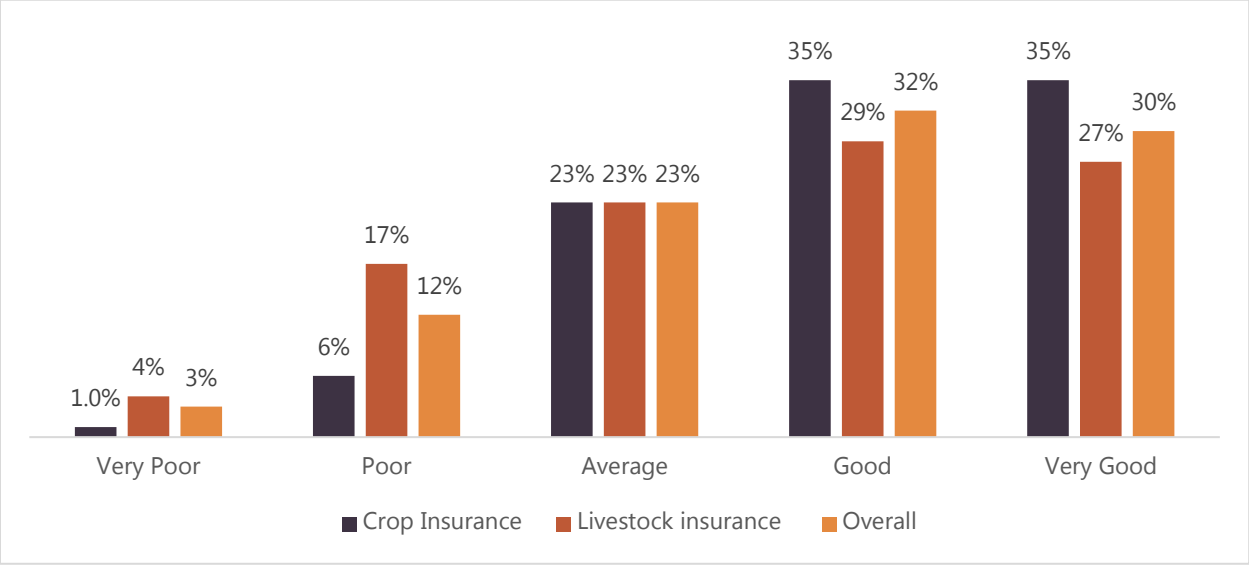
The results indicate that participants generally have a good level of understanding of how insurance works. Overall, 32 percent rated their understanding as good and 30 percent as very good, meaning that 62 percent perceive themselves to have a strong understanding of how insurance works. A further 23 percent rated their understanding as average, while only 15 percent reported poor or very poor understanding.

Crop insurance clients demonstrate a higher level of understanding compared to livestock insurance clients. Among crop insurance clients, 70 percent rated their understanding as good or very good, compared to 56 percent among livestock insurance clients. Similarly, low understanding (poor or very poor) is more common among livestock insurance clients (21 percent) than among crop insurance clients (7 percent).

In comparison to the general national level, where understanding of insurance and other financial products among smallholder farmers is typically low (48 percent)[3] due to limited financial literacy and limited exposure to formal insurance, these results suggest that the project has significantly improved beneficiaries' understanding of how insurance works. The high proportion of Respondents reporting good or very good understanding indicates that awareness and training activities were effective in building knowledge of insurance concepts among participating farmers.

[3] FinScope 2020

Figure 6: Respondents' level of understanding of how insurance works (%)



The study assessed respondents' level of understanding across different micro-insurance topics by focusing on the 85 percent of respondents who reported having average to very good knowledge of insurance. The results show mixed levels of understanding of different agricultural insurance topics among Respondents. Knowledge was highest for topics directly related to the type of insurance procured. For example, 88 percent of crop insurance clients understood what crop insurance covers, while 79 percent of livestock insurance clients understood what livestock insurance covers. However, cross-knowledge between products was much lower: Only 34 percent of livestock insurance clients understood what crop insurance covers, and only 16% of crop insurance clients understood what livestock insurance covers.

Understanding of other aspects of insurance was moderate. About 71 percent of crop insurance clients and 55 percent of livestock insurance clients understood how premiums are paid, giving an overall understanding level of 63 percent. In contrast, knowledge of when payouts are made remained limited, with only 43 percent of crop clients and 36 percent of livestock clients reporting understanding (39 percent overall). Knowledge of how to report a loss was also moderate, at 45 percent among crop clients and 39 percent among livestock clients (42 percent overall). These findings point to persistent information gaps, some of which reflect underlying supply side challenges that may limit beneficiaries' ability to fully utilize insurance products.

Understanding of the role of insurance in protecting against climate shocks was relatively better, especially among crop insurance clients (58 percent), compared to livestock insurance clients (35 percent), resulting in an overall understanding level of 46 percent.

These findings highlight important insights about underlying incentives, product design, and targeting strategies. They suggest that farmers tend to prioritize learning about products that

directly relate to their immediate needs or production activities, which have implications for scaling insurance uptake. Rather than pursuing broad but shallow outreach across all smallholder farmers, the evidence indicates that deeper engagement with farmers around a specific product may be more effective. Once farmers experience a product that works well and addresses a real risk, they are more likely to build trust in insurance generally and consider adopting additional insurance products when relevant needs arise.

Table 5: Knowledge of crop and livestock insurance topics among Respondents

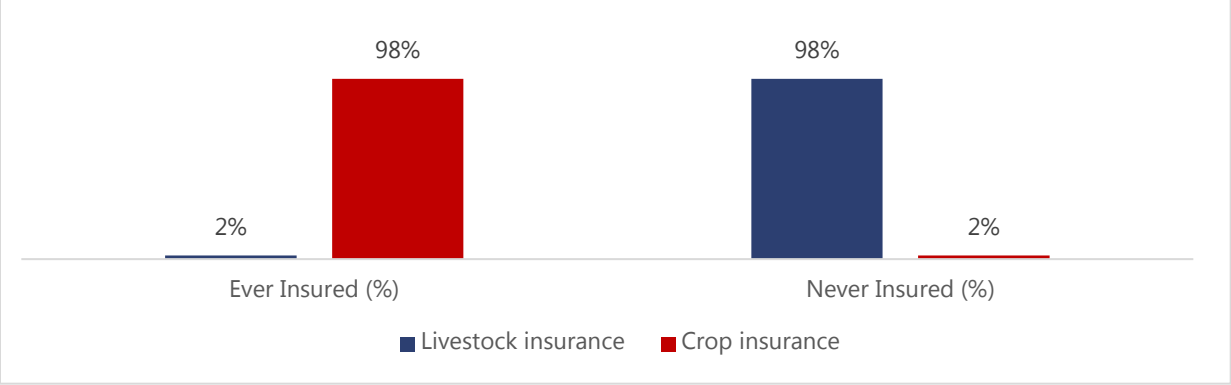
Category	Crop Insurance	Livestock insurance	Overall
What crop insurance covers	88%	34%	60%
What livestock insurance covers	16%	79%	49%
How premiums are paid	71%	55%	63%
When payouts are made	43%	36%	39%
How to report a loss	45%	39%	42%
How insurance protects against climate shocks	58%	35%	46%

ADOPTION

This section assesses the level of adoption of agricultural insurance products among espondents, with particular attention to uptake, continued use, and interaction with insurance processes.

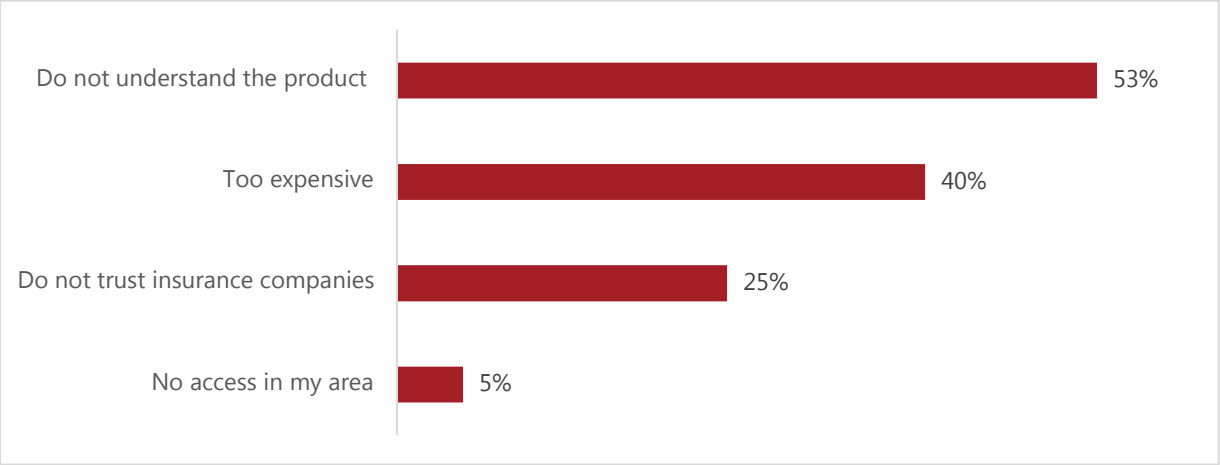
The findings reveal a disparity in uptake between livestock and crop insurance among farmers who had been sensitized on these products. Information on crop insurance was associated with very high adoption, with 98 percent of informed farmers having insured their crops. In contrast, livestock insurance recorded minimal uptake, as only 2 percent of farmers reached through outreach activities had purchased the insurance product. This indicates that while sensitization efforts effectively reached farmers across both product lines, they were considerably more successful in translating knowledge into adoption for crop insurance than for livestock insurance.

Figure 7: Proportion of Farmers Who Purchased Insurance



Respondents who reported that they had not purchased livestock insurance were asked to provide the main reasons for not signing up for the product. The findings show that lack of trust in insurance companies is the most significant barrier to uptake, reported by 53 percent of Respondents. Additionally, 40 percent of farmers perceived livestock insurance as too expensive, indicating that affordability remains a key constraint for smallholder farmers. Furthermore, 25 percent of Respondents reported that they did not understand the product. In contrast, only 5 percent indicated that lack of access in their area was a barrier, implying that physical availability of livestock insurance is less of a challenge compared to issues related to trust, cost, and understanding.

Figure 8: Perceived barriers to livestock insurance adoption



Channels Used for Paying Insurance Premiums and Receiving Claims

Respondents who had purchased crop insurance were asked to indicate the channels they used to pay premiums and receive claims. The findings reveal that mobile or digital platforms were the most widely used channel, cited by 58 percent of Respondents. Agro-dealers were the second most commonly used channel at 42 percent, highlighting their key role as intermediaries in facilitating access to insurance services. Farmer cooperatives accounted for 12 percent of usage, indicating a moderate but less dominant role in insurance facilitation. Only 5 percent of respondents reported engaging directly with insurance companies or their agents, while community-based channels, such as extension officers or Village Savings and Loan Groups were the least utilized channel at 1 percent, largely because they were not part of the primary information dissemination strategy from the outset of implementation.

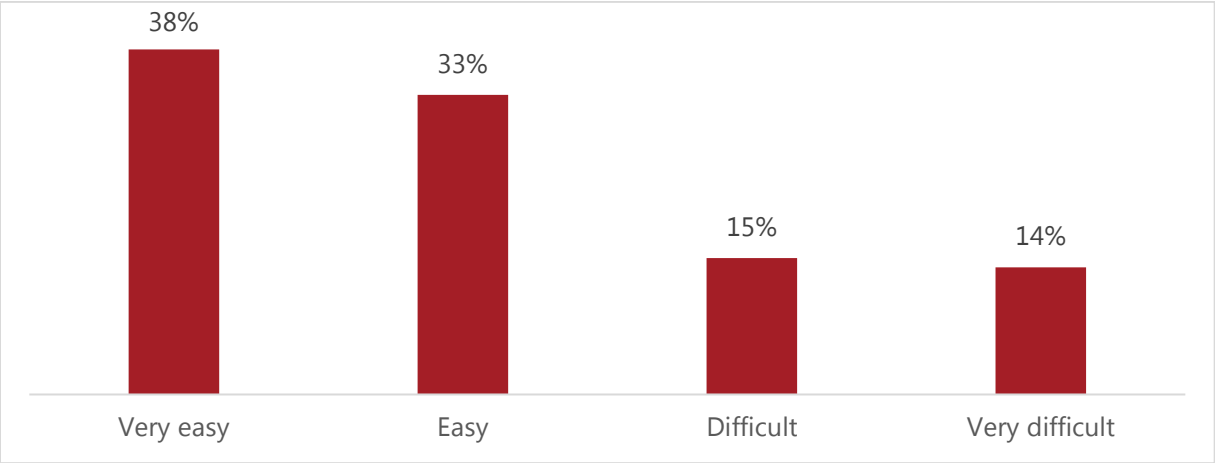
Table 6: Delivery Channels for Insurance Services

Channels Used	Proportion
Mobile/digital platforms	58%
Agro-dealers and input supplier	42%

Farmer cooperatives	12%
Direct engagement with insurance companies or their agents	5%
Community-based channels	1%

Respondents who had used mobile money to pay livestock insurance premiums were asked to rate their experience with the payment process. The majority reported a positive experience, with 38 percent describing it as "very easy" and 33 percent as "easy," indicating that mobile money is generally user-friendly for insurance transactions. However, 15 percent found the process difficult and 14 percent very difficult, suggesting that a notable minority still face challenges in using digital payment platforms for insurance.

Figure 9: Mobile money experience (%)



Claims and payout experience

To assess the effectiveness and utilization of agricultural insurance, respondents were asked about their experience with losses, claims submission, and payouts for both crop and livestock insurance. The findings reveal clear differences between the two products. Nearly all farmers with crop insurance (95 percent) reported having experienced a crop loss at some point, and a large majority of these farmers (85 percent) proceeded to submit an insurance claim. Among those who filed claims, 75 percent reported receiving a payout.

Table 7: Losses, claims and pay-out

Category	Crop Insurance	Livestock Insurance
Farmers that ever suffered a loss	95%	0%
Farmers that made a claim	85%	N/A
Farmers that received payout	75%	N/A

Trust and Satisfaction

To assess farmers' experiences with the insurance claims process, Respondents who had submitted claims were asked to rate their level of satisfaction. The results indicate generally low satisfaction with the claims process. Nearly half of the Respondents (49 percent) reported that they were not satisfied, suggesting significant challenges in the way claims were handled. A further 23 percent indicated that they were moderately satisfied, while 20 percent stated that they were satisfied, showing that only a minority had a clearly positive experience. Very few Respondents reported high satisfaction, with 6 percent being very satisfied and only 2 percent extremely satisfied with the claims process.

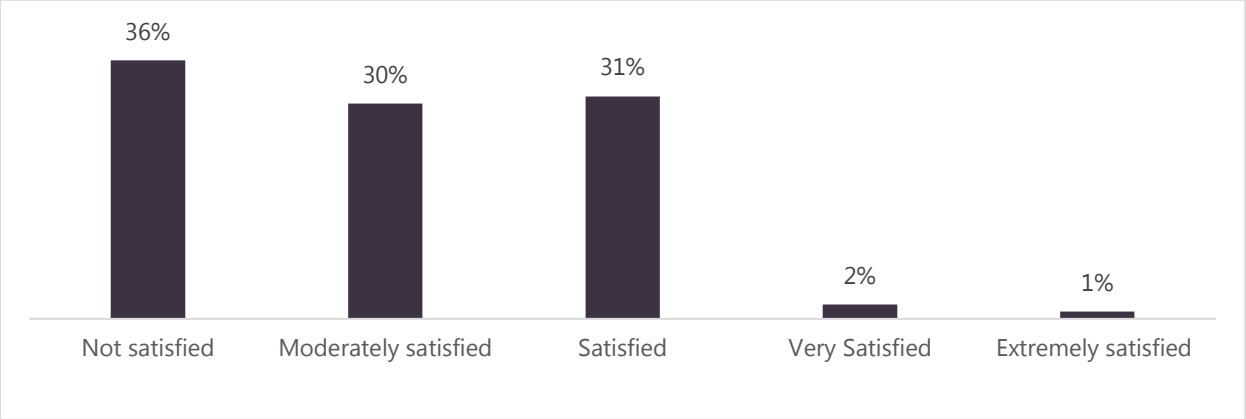
Table 8: Satisfaction Level with Insurance Claims Process

Satisfaction Level with Insurance Claims Process	Percent
Not satisfied	49
Moderately satisfied	23
Satisfied	20
Very satisfied	6
Extremely satisfied	2

Qualitative feedback revealed that the majority of farmers reported significant delays in receiving feedback on their claims. Many Respondents indicated that communication from the insurance providers was slow and often unclear, leaving them uncertain about the status of their claims for extended periods. Furthermore, farmers noted that when payouts were eventually received, they often came well after the period in which the funds would have been most useful for recovery. As a result, while payouts were sometimes provided, their delayed timing reduced their practical value in helping households cope with shocks and recover promptly.

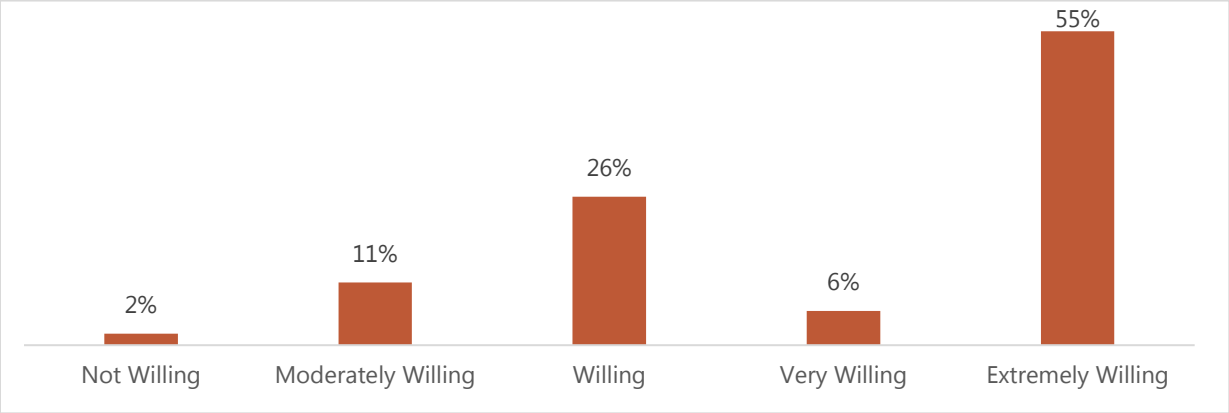
To assess farmers' perceptions of the value of insurance compensation, respondents who received payouts were asked to rate their level of satisfaction with the payouts. The findings show mixed experiences, with more negative than strongly positive assessments overall. At least 36 percent of Respondents reported that they were not satisfied with the payouts, suggesting that the compensation either fell short of expectations or was not timely or adequate for recovery needs. Another 30 percent indicated that they were moderately satisfied, while 31 percent stated that they were satisfied, implying that for some farmers, the payouts were useful, though not fully optimal. Only a very small proportion expressed high satisfaction, with 2 percent reporting they were very satisfied and just 1 percent extremely satisfied with the payouts.

Figure 10: Levels of satisfaction



Despite many Respondents' reporting dissatisfaction with the claims process and payout arrangements, 81 percent still indicated a strong willingness to continue using insurance as a risk mitigation mechanism, with 55 percent stating they were extremely willing and 26 percent Willing. From the qualitative feedback farmers felt that insurance remains an important safety net against climate risks. Several Respondents also indicated that although the claims experience was imperfect, they preferred to keep the product rather than face future shocks without any form of financial protection. Others noted that improvements in communication, transparency, and timeliness of payouts would make them even more confident users of insurance going forward.

Figure 11: Willingness to continue using insurance



OVERALL EVALUATION OF PROGRAMME PERFORMANCE AND OUTCOMES

This section provides an integrated assessment of the programme's performance by examining its relevance to smallholder farmers' needs, efficiency in achieving intended outcomes, contribution to household resilience, broader impact on financial inclusion and livelihoods, and the sustainability of results beyond the project period.

Project Relevance

The evaluation aimed to assess the extent to which the project responded to the beneficiaries' needs and priorities, as well as understand the extent to which objectives were consistent with recipient needs. The following question was addressed:

- To what extent did the project respond to the beneficiaries' needs and priorities?

Overall, participants across qualitative engagements consistently reported that the project directly supported their ability to prepare for, respond to, and recover from the effects of climate change. They noted that prior to the intervention they did not fully understand how agricultural insurance worked; however, they now have a clearer understanding of its purpose and how it works. Respondents further explained that in the past they often sold household assets whenever they experienced crop losses, but with increased awareness and access to insurance, they no longer feel as compelled to resort to such coping strategies.

In addition, survey findings showed that a significant proportion of households (45 percent) experienced climate-related or livelihood shocks, particularly drought. This indicates that the insurance products were designed around risks that farmers were genuinely facing, further confirming the relevance of the intervention.

Furthermore, a majority of Respondents (63 percent) believed that agricultural insurance was beneficial because it reduced financial loss, supported livestock replacement, and helped households recover from climate shocks. This positive perception suggests that the intervention addressed priorities that farmers considered important.

Efficiency

Overall, the project demonstrated moderate operational efficiency, with strong performance in delivery mechanisms but constraints in system functionality. Payment delivery was efficient in practice, as premiums and payouts were successfully processed through mobile money channels, enabling timely transactions and achieving the target for market actors using digital channels. However, technical glitches in the digital platform prevented direct transaction processing and recording, limiting the ability to accurately track timeliness and value through the system. Platform downtime and module failures, particularly in claims and crop cut experiments, reduced functional efficiency, especially in rural areas with weak connectivity. Cost efficiency varied by product. Crop insurance premiums averaging ZMW 449.10 were generally affordable, while similar average premiums for livestock insurance were perceived as high. This difference in perception was partly driven by the pricing model, as livestock farmers pay premiums per animal, which increases total costs with herd size, whereas crop insurance is typically based on area yield, making costs feel more predictable and manageable.

Table 9: Summary of Efficiency Indicators and Evaluation Findings

Indicator Category	Log frame Indicator	Summary of Results
Timeliness	MSC7.1: Value and Timeliness of Insurance Payments	Insurance payments were mainly processed through conventional mobile money channels rather than the digital platform due to technical system glitches preventing direct transactions. Although payments were completed, they were not captured in platform records, affecting measurement of both value and timeliness of digital payments.
System Functionality	MSC55.1: Feedback on Reduced Platform Downtime	Platform downtime was caused by technical and operational challenges. The ICIS onboarding module worked well, but crop-cut experiment and claims modules failed, especially in rural areas with weak connectivity. Intermittent system failures also affected availability. Livestock insurance system deployment was limited due to integration challenges and insurer reluctance to connect to third-party systems following past fraud concerns, resulting in partial operationalization and limited functionality.
Delivery System	MSC6: Number of Market Actors Delivering Insurance via Digital Platforms	Target fully achieved. Premium payments and payouts were successfully conducted through mobile money channels.
Cost	MSC2: Average Premium Value Paid by SHFs	The average premium for crop insurance was ZMW 449.10 and was generally considered affordable by farmers. However, the average premium of about ZMW 450 for livestock insurance was perceived as unaffordable, indicating differences in affordability perceptions between products.
User Process	% of SHFs Using Digital Platforms	58 percent of crop insurance clients used mobile money platforms to pay premiums and receive payouts, indicating moderate adoption of digital payment channels.

Impact

Although it is still too early to conclusively determine long-term impact, the evaluation sought to assess progress against the project's defined impact and financial inclusion indicators. Out of a target of 3,000 beneficiaries, the project reached 1,862 people, representing 62 percent achievement. This outreach has expanded access to crop and livestock insurance products among smallholder farmers and laid the groundwork for improvements in resilience and financial inclusion.

With regard to improved access to basic goods and services, early findings indicate positive movement. More than half of crop farmers reported that they no longer need to sell household assets when faced with climate-related disasters. This is a strong signal that households are better able to protect essential consumption and avoid distress coping mechanisms, which directly contributes to improved access to food and other basic needs during shocks.

In terms of income impact, while it is early to confirm an increase from the baseline of ZMW 1,650 to the target of ZMW 1,984, early resilience outcomes suggest that households are increasingly able to protect productive assets and stabilize livelihoods. Reduced asset sales, improved coping mechanisms, and greater preparedness are important factors to sustain income growth. A longer-term follow-up assessment will be required to conclusively measure income effects.

Progress toward climate adaptation is already evident. Over 90 percent of farmers demonstrated understanding of agricultural and climate-related risks, indicating strong knowledge gains. This improved understanding has translated into preparedness behaviour, with at least 65 percent of farmers reporting that they have started saving specifically for climate-related risks. These shifts from awareness to financial planning are critical steps toward enhanced adaptive capacity. Furthermore, more than half of crop farmers reported avoiding distress asset sales during disasters, demonstrating improved ability to absorb and recover from shocks.

The financial inclusion outcome indicators also show early positive trends. Increased uptake of agricultural insurance represents expansion of formal financial product usage among smallholder farmers. The widespread use of digital platforms for premium payments demonstrates integration into digital financial services. In addition, improvements in financial knowledge are among the strongest early achievements, with a high proportion of respondents demonstrating understanding of insurance concepts and risk management. These knowledge gains are foundational to deeper and more sustained financial inclusion.

Sustainability

The sustainability of the project is grounded in its market-systems approach, which embedded crop and livestock insurance within existing commercial and digital financial structures. By partnering with insurers, mobile network operators, fin-techs, agro-dealers, and cooperatives, the

intervention strengthened institutional capacity and positioned insurance products to continue beyond the project period.

From the demand side, sustainability is reinforced by improved knowledge and behavioural change. High levels of risk awareness, increased savings for climate-related shocks, use of digital payments, and reduced reliance on distress asset sales indicate that farmers are adopting practices likely to persist over time. The establishment of digital insurance platforms further enhances long-term viability by improving efficiency and scalability, while targeted inclusion of women broadens participation and strengthens household resilience. Together, these elements provide a solid foundation for sustained impact.

Sustainability within the Market System

The project achieved significant progress toward embedding inclusive agricultural insurance within Zambia's market system rather than sustaining it as a donor-dependent intervention. Both the Area Yield Index Insurance (AYII) under ICIS and the Multi-Peril Livestock Insurance product under ILIP were successfully designed, refined, approved by the Pensions and Insurance Authority, and integrated into participating insurers' portfolios. The institutionalisation of the products demonstrates that they are now market-owned and can continue beyond project support.

Furthermore, insurers strengthened their internal capacity in product design, pricing, underwriting, and administration of inclusive insurance. Operational systems, actuarial methodologies, trained Crop Cutting Experiment agents, and mobile money payment integration remain in place as durable market assets. These investments contribute to long-term system capability.

Evidence from the evaluation report indicates that demand-side sustainability is emerging, though not yet fully consolidated. First, awareness and knowledge gains were substantial. Overall, 94 percent of Respondents reported receiving insurance information, and 62 percent rated their understanding of how insurance works as good or very good. This level of awareness is significantly higher than typical national levels (47 percent) of insurance understanding among smallholder farmers, suggesting that knowledge improvements are likely to persist beyond the project period.

Second, behavioural shifts point toward sustained demand. At least 65 percent of farmers reported that they had started saving specifically for climate-related risks, and more than half of crop farmers indicated that they no longer needed to sell household assets during disasters. These findings show deeper risk-management behaviour rather than one-time product uptake, which strengthens long-term sustainability from the demand side.

Third, willingness to continue using insurance remains strong despite operational challenges. Even though many Respondents expressed dissatisfaction with claims processes and payout timing, 81

percent reported that they were willing or extremely willing to continue using insurance as a risk mitigation tool.

Conclusion

The evaluation finds that the project made meaningful progress in expanding awareness, access, and use of agricultural insurance among smallholder farmers. The intervention was highly relevant to farmers' needs, particularly in addressing climate-related production risks. Awareness activities were effective, with most farmers reporting that they had received information about insurance and demonstrating improved understanding of how insurance products work.

Adoption outcomes differed across products. Crop insurance recorded very high uptake among informed farmers, while livestock insurance uptake remained low due to concerns related to affordability, trust in insurance providers, and limited product understanding. These findings suggest that while awareness is critical, additional efforts are required to strengthen trust and improve product design for livestock insurance.

The evaluation also provides early evidence of improved resilience among participating farmers. Many reported greater preparedness for climate shocks, including increased savings for climate-related risks and reduced reliance on distress coping strategies such as selling household assets. Overall, the project laid an important foundation for strengthening agricultural risk management and expanding inclusive insurance for smallholder farmers in Zambia.

Recommendations

Based on the findings, this study presents recommendations addressing both supply-side and demand-side constraints.

Supply Side

- Improve claims processing and communication: Insurance providers should strengthen claims management systems to ensure faster processing and clearer communication with farmers. Timely feedback and transparent communication on claim status can significantly improve trust and satisfaction among users.
- Review livestock insurance pricing models: Insurers should reassess livestock insurance pricing structures to improve affordability for smallholder farmers. Flexible premium structures or bundled products may help reduce the perceived cost burden associated with insuring multiple animals.
- Strengthen digital platform functionality: Market actors should invest in improving the reliability and functionality of digital insurance administration platforms, particularly ensuring that claims modules and other operational components function effectively in low-connectivity rural areas.
- Enhance product design and farmer-centred communication: Insurance providers should simplify product features and improve communication on key aspects such as claims

procedures, payout triggers, and reporting mechanisms to ensure farmers fully understand how to use the products.

- Leverage agro-dealers and cooperatives as distribution channels: Agro-dealers and farmer cooperatives should be further integrated into insurance delivery systems, as they already serve as trusted intermediaries and can help facilitate premium payments, claims reporting, and product information dissemination.

Demand-Side

- Strengthen financial and insurance literacy programmes: Continued investment in farmer education is necessary to deepen understanding of agricultural insurance, particularly around claims processes, payout triggers, and reporting procedures.
- Promote trust-building initiatives: Community-based engagement and demonstration of successful claims experiences should be used to strengthen farmer confidence in insurance products, especially for livestock insurance.
- Encourage deeper product engagement before scaling: Evidence suggests that farmers better understand and adopt insurance when engagement focuses on a specific product relevant to their livelihood. Programmes should prioritize deeper engagement within specific value chains rather than broad but shallow outreach.
- Expand awareness through community-based channels: Since community meetings proved to be the most effective dissemination channel, future interventions should continue prioritizing these approaches while complementing them with local radio and extension services.
- Promote complementary risk management practices: Farmers should be encouraged to combine insurance with other resilience strategies such as savings for climate shocks and improved farm management practices to strengthen overall household resilience.