



WFP EVALUATION

Final Evaluation of Satellite Index Insurance for Pastoralists in Ethiopia Programme (SIPE 2019-2022)

Decentralised Evaluation Report
WFP Ethiopia Country Office (CO)

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World Food
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Executive Summary

- i. This draft report summarizes the decentralized final evaluation of the Satellite Index Insurance for Pastoralists in Ethiopia (SIPE) Programme, covering 2019 to 2022 with a budget of \$5.6 million co-financed by Sweden and the Swiss Agency for Development and Cooperation. Commissioned by WFP's Ethiopia Country Office and conducted by the Center for Evaluation and Development (C4ED), this evaluation followed WFP's Decentralized Evaluation Quality Assurance System (DEQAS) standards.

Evaluation Context and Subject

- i. Pastoralism is a critical livelihood for 12-15 million Ethiopians, particularly in the Somali region, which faces severe challenges due to climate change-induced droughts. These droughts have devastating effects on livestock and food security. Despite efforts by the Ethiopian government and development partners to support pastoral communities, the Somali region continues to struggle with high rates of poverty, malnutrition, and low educational attainment.
- ii. The SIPE programme is a Public - Private Partnership between the World Food Programme Country Office, the International Livestock Research Institute (ILRI), Somali Regional Bureau of Agriculture and Natural Resource Development (BoANRD), Somali Regional Bureau of Livestock and Pastoralists Development (BoLPD), Somali Micro Finance Institution (SMFI- now transformed to Shebelle Bank), a pool of 4 insurance companies, Mercy Corps, Ethiopian Meteorological Institute, and other development partners. Launched in March 2018, it was designed to strengthen the adaptation and resilience of Somali pastoralist households by insuring them against drought-related livestock risks. The insurance was designed to enable pastoralists to respond to the onset of severe droughts and loss of pasture cover and grazing reserves by purchasing supplementary livestock feed, water, and veterinary inputs to keep their core livestock alive. By 2021, the programme had expanded from three to eleven Woredas, benefiting over 28000 households. The programme offered fully subsidised insurance coverage, work in public activities for able-bodied household members, and financial literacy training.

Evaluation Features

- iii. The SIPE programme evaluation's objective was to understand if and how SIPE protected pastoralists against drought risks, whether there was any behavioural change among participants, and the changes in household well-being attributed to the programme. The evaluation will serve the dual objectives of accountability and learning through identifying findings, lessons and conclusions based on evidence triangulated across data sources and formulating recommendations. That is, the evaluation offers impartial evidence on SIPE's performance and outcomes for internal and external stakeholders. It identifies factors behind successes or shortcomings, highlights lessons learned, showcases best practices, and provides insights for improving SIPE's future implementation. This final evaluation assesses the performance of SIPE in enhancing pastoral households' resilience to drought-related shocks and achieving food security and provides impartial evidence of the programme's actual impact on stakeholders. It also uncovers reasons behind the results, identifies good practices, and offers learning points to facilitate decision-making regarding the programme's scalability and potential improvements for future initiatives.

Methodology

- iv. The evaluation was conducted using a mixed-method approach, relying on a quasi-experimental quantitative method in combination with qualitative interviews and data. The evaluation team sourced, analysed and triangulated secondary data and information, as well as primary quantitative and qualitative data through household, key informant and community discussions and interviews. As a first step, a desk review was carried out, focusing on the programme documents, databases and literature cited in this report. Primary data collection took place between March and June 2024 in seven of the programme Woredas. Quantitative data was collected through a survey of 2142 pastoralist and agro-pastoralist households including SIIPE beneficiaries and comparison- non-SIIPE households. Qualitative data was collected through 9 Focus Group Discussions (FGDs), 10 In-depth interviews (IDIs), and 16 key informant interviews (KIIs). Descriptive and inferential analyses were conducted on both types of data, and information was triangulated.

Findings

Relevance

- v. The evaluation finds that the SIIPE programme was highly relevant to WFP's goal of providing sustainable solutions for pastoralists and agro-pastoralists. SIIPE aligns with the Ethiopia Pastoral Development Policy and Strategy in which developing livestock assets of pastoralists and reducing their vulnerability to disaster has been included as one of the multiple strategy implementation activities including the development of index-based animal insurance services which strongly aligns with the SIIPE programme.
- vi. The programme also actively involved stakeholders such as government offices, insurance companies, non-governmental organizations, and community representatives. By actively involving stakeholders, the program was able to recognise the need to focus on preventable measures against drought and replace direct assistance with livestock insurance schemes. The programme also contributed to the diversification of financial services and savings sources from which mainly helped women beneficiaries who were more engaged in Village Savings and Loan Associations (VSLAs) and made effective use of insurance payouts. According to our qualitative interviews, the inclusion of the VSLA component in the SIIPE program has increased its relevance, particularly to women, who are used to engaging in similar saving groups. Consultative discussions with community members influenced changes in the programme design, including membership criteria. However, the programme faced challenges including a difficult enrolment process and compensation amounts that were often lower than the actual losses incurred by beneficiaries.

Effectiveness

- vii. The programme achieved positive results in meeting its targets and successfully reached about 94% of the intended beneficiaries. Other targets were also assessed from the Result Measurement Framework but yielded mixed results.
- viii. While the extra public workdays contributed to creating valuable community assets, including irrigation canals, roads, water wells, public toilets, rangeland improvements, and tree planting initiatives, maintaining these assets proved challenging due to the labour and capital-intensive nature of the tasks, a lack of commitment from some community members, and the need for further budget allocations.

- ix. The SIIPE also faced challenges from stakeholders, and bureaucratic delays affected the timeliness of payouts. Accessibility issues due to limitations in mobile banking and the impact of inflation on insurance payouts were also observed. Infrastructure constraints, such as inaccessible roads and transport, and the COVID-19 pandemic further limited community engagement which was essential for large-scale gatherings necessary for activities such as training, Disaster and Risk Reduction (DRR), and water and rangeland management. Despite these obstacles, the SIIPE programme demonstrated positive results, highlighting collaboration, full premium coverage, and a focus on livestock protection as key elements of its success.

Efficiency

- x. Due to missing annual data on achievements and inputs, efficiency analysis was limited. The average cost per beneficiary was about \$200, but cost comparisons with other livestock insurance programs were unavailable, complicating efficiency assessments.

*Impact*¹

- xi. The impact was mixed. SIIPE led to higher spending on livestock essentials and increased access to financial services. However, it had limited effects on income, asset ownership, and indicators like child labour and marriage. Beneficiaries had better insurance knowledge and a greater willingness to pay for insurance. While the program didn't reduce livestock mortality or improve income, it increased food security as measured by the Household Food Insecurity Access Score (HFIAS) but had little effect on dietary diversity.
- xii. The impact of the SIIPE was mixed. SIIPE led to higher spending on livestock essentials (water, veterinary medicine and forage) and increased access to financial services and institutions (mobile banking accounts, Village Savings and Loan Associations (VSLAs), and Rotating Savings and Credit Associations (ROSCAs), especially for females. Qualitative data suggest that SIIPE fostered financial management and saving practices among beneficiaries. However, the programme had minimal impact on income and asset ownership, except for productive assets, which were found to be higher in the SIIPE households. Otherwise, no significant differences were observed in the number of income sources, total income, or overall and durable asset ownership. Long term wellbeing indicators such as school absenteeism, child labour and child marriage were also not positively impacted by the programme.
- xiii. SIIPE also increased beneficiaries' awareness and willingness to pay for insurance, and they were also more likely to have already purchased livestock insurance and expressed greater interest in paying for livestock insurance, particularly for shoats. In addition, insurance payouts reportedly enabled some households to save livestock during droughts, potentially leading to better selling prices later. In terms of livestock mortality and sales, the evaluation did not find a significant reduction in livestock deaths or a change in overall livestock offtake, sales or other forms. While the number of livestock sold remained similar between treatment and comparison groups, average selling prices were lower in the treatment group for camels and shoats, suggesting market saturation.

¹ The report uses treated and comparison terminologies for SIIPE beneficiaries and non-SIIPE households, respectively through the report.

- xiv. Beneficiaries experienced an increase in food security, as measured by the Household Food Insecurity Access Score (HFIAS) score. Qualitative data also revealed that some beneficiaries used the insurance payouts to cover food expenses during shocks. However, the programme did not have a significant impact on dietary diversity or affect the overall level or composition of household food expenditures.

Sustainability

- xv. The programme benefited from collaboration with stakeholders, including government ministries, microfinance institutions, and insurance companies. While WFP primarily partnered well with insurance companies, interviews with informants suggested expanding partnerships to include livestock suppliers, water providers, and other entities relevant to pastoral livelihoods. In addition, qualitative interviews considered the programme to be more sustainable in the long run than traditional in-kind food assistance provides short-term relief but doesn't build long-term resilience. While livestock insurance played a crucial role in helping pastoralists recover from shocks and maintain their livelihoods, qualitative findings indicated that the programme faced sustainability challenges, particularly in maintaining programme benefits after abrupt completion due to budget shortfalls.

Cross-cutting Issues

- xvi. Capacity gaps, particularly in agricultural insurance expertise, were identified within the programme design, despite trainings provided by the International Livestock Research Institute (ILRI). Additionally, to ensure accountability and effective implementation, the programme established complaint and feedback mechanisms, which provided beneficiaries with a channel to voice concerns, helping programme managers identify and address issues promptly. Furthermore, the programme mitigate protection risks by promoting informed decision-making among beneficiaries and through stakeholder consultations. Collaboration with Mercy Corps and the establishment of VSLA groups further supported the programme's focus on sustainable solutions by empowering communities and fostering self-reliance.
- xvii. The programme demonstrated a positive impact on gender-related outcomes, notably enhancing the understanding of savings and financial literacy among women through initiatives such as VSLAs and ROSCAs. Overall, the programme's focus on gender-sensitive strategies helped empower women, leading to more favourable outcomes in both financial decision-making and household welfare.

Lessons

- xviii. The SIPE programme employed several good practices that offered valuable lessons for similar future interventions. A key strength was the programme's reliance on a feasibility study and pilot programme involving multiple stakeholders at national and community levels. This collaborative and innovative approach attracted the attention of the Ethiopian government, suggesting its potential for wider adoption. Furthermore, The programme demonstrated the possibility of transforming humanitarian aid into development-oriented and life-changing interventions. It raised awareness of livestock insurance, benefiting both pastoralist communities by introducing them to a new risk management tool, and insurance companies by encouraging them to offer similar products tailored to the specific needs of pastoralists. Issues such as discrepancies between satellite readings and actual drought severity highlighted the importance of flexibility and adaptability in programme implementation. The programme also highlighted the need for integrated humanitarian and

development interventions, especially with existing partner organisations in the region, to maximise impact.

Conclusions

- xix. **Relevance and Coordination:** The evaluation concludes that SIPE was highly relevant to WFP's objectives of enhancing socio-economic conditions of pastoralists. It aligns with the strategies and activities suggested in the Ethiopia Pastoral Development Policy and Strategy² including the development of index-based animal insurance services. SIPE also demonstrated extensive stakeholder engagement at national, regional, and local levels, including governmental bodies, research institutes, insurance companies, and community representatives demonstrating the programme's alignment with the WFP Ethiopia's strategic objective 5³ (partnering for SDG results). Consultative processes facilitated adjustments in programme, ensuring alignment with community needs and inclusion of marginalised and underrepresented groups. However, challenges such as stakeholder unfamiliarity with livestock insurance and delays in insurance payouts affected the implementation and effectiveness of the programme (Conclusion 1).
- xx. **Challenges in Implementation:** While reaching 94% of its target beneficiaries, the SIPE programme faced labour and budget constraints, impacting its effectiveness. Strong collaboration and livestock protection were key success factors, yet limited understanding of the programme and technical challenges hindered progress (Conclusion 2).
- xxi. **Cost-Efficiency Assessment:** The evaluation struggled to assess the efficiency of the SIPE programme due to missing expenditure and beneficiary data, emphasising the need for improved tracking to enable accurate cost-efficiency analysis in future initiatives (Conclusion 3).
- xxii. **Limited Impact on Livelihoods:** Although SIPE had a positive impact on productive resources and decisions, this did not translate into improved livelihoods or income. Higher payouts associated with a shorter process were noted to be major constraints by beneficiaries and lend themselves as key areas for improvement (Conclusion 4).
- xxiii. **Insurance Awareness and Barriers:** While SIPE improved beneficiaries' knowledge and attitudes toward livestock insurance, low awareness and unaffordable premiums were significant barriers to wider uptake. More accessible and affordable insurance options are necessary for sustainable participation (Conclusion 5).
- xxiv. **Use of Financial Services:** Beneficiaries showed increased engagement with formal financial services, yet mobile banking adoption remained low due to access and trust issues. Training and transparency are vital for enhancing mobile banking uptake (Conclusion 6).
- xxv. **Sustainability of Benefits:** Temporary benefits for livestock management faded after payouts ended, highlighting the need to reassess the sustainability and scope of livestock insurance (Conclusion 7).
- xxvi. **Food Security and Dietary Diversity:** While the programme enhanced food security, one of WFP Ethiopia's strategic objective 1 (ending hunger by protecting access to food), it did not significantly

² <https://sdr-africa.com/wp-content/uploads/2022/11/PastoralPolicyofEthiopia.pdf>

³ <https://www.wfp.org/operations/et02-ethiopia-country-strategic-plan-2020-2025>

affect dietary diversity or expenditure patterns. Future initiatives should also focus on educating beneficiaries about varied food groups (Conclusion 8) to significantly contribute to the 2nd strategic objective, improving nutrition.

- xxvii. **Promoting Sustainability:** The SIPE programme shows promise in enhancing sustainability through collaboration and strategic interventions, despite challenges such as stakeholder commitment and limited private sector engagement (Conclusion 9).
- xxviii. **Gender Mainstreaming:** Gender mainstreaming efforts in SIPE led to improved engagement of women beneficiaries in financial services, but there remains a need for more equitable participation across genders, particularly in program implementation (Conclusion 10).
- xxix. **Capacity Building and Accountability:** The programme improved sustainability through capacity strengthening, gender mainstreaming, and protective measures for affected populations. Continuous training and feedback mechanisms are crucial for managing beneficiary concerns and ensuring effective risk mitigation (Conclusion 11).
- xxx. The SIPE programme has provided **valuable lessons for future initiatives**. However, challenges such as sustaining results and addressing beneficiaries' needs indicate areas for improvement. To address these weaknesses, future programming should integrate insurance into broader development efforts, enhance stakeholder awareness, explore Sharia-compliant options, and strengthen monitoring and evaluation frameworks. These insights will guide future initiatives to align programmatic success with developmental goals, ensuring long-term impacts and resilience.

Recommendations

- xxxi. The evaluation recommends the following steps to improve programming efforts similar to the SIPE programme in the future:
 - 1) Expand awareness efforts both before and during program implementation to promote better understanding and increased participation.
 - 2) Streamline and simplify the enrolment processes, and ensure ease of access even in remote areas, to facilitate beneficiaries' access to and adoption of the programme.
 - 3) Explore customised insurance options that cater for the specific needs of individuals by bundling with other financial services or tools, coverage of other types of risks.
 - 4) Improve the claims process so that it is transparent, timely, and efficient by engaging community leaders, using monitoring data, and addressing discrepancies between satellite data and on-the-ground conditions.
 - 5) Employ more female staff at the woreda levels implementing gender-sensitive recruitment strategies and tailored support for a safer and more inclusive environment for female beneficiaries to voice their concerns.
 - 6) Strengthen partnerships and integration with other Humanitarian Development and Peace (HDP) actors to use multisectoral and holistic approach for various activities to ensure sustainability of outcomes.

1. Introduction

1.1. Evaluation features

1. **Evaluation rationale:** This report presents the results of the decentralised final evaluation of the SIPE Programme of the World Food Programme (WFP) Country Office (CO) in Ethiopia. This is an activity evaluation, including findings, lessons, conclusions and recommendations.

2. The evaluation aims to meet the evidence needs of the country office to: i) establish if and how the programme provided greater protection for pastoralists against drought-induced risks; ii) identify whether there was any behavioural change among SIPE programme participants; and iii) measure change in wellbeing of households attributed to the programme; and assess the performance and results of SIPE based on evaluation criteria: relevance, effectiveness, efficiency, impact, sustainability.

3. **Evaluation scope:** The evaluation covers the design and implementation of SIPE programme activities, outputs, outcomes and impacts from 2019 to 2022 in seven woredas of the Somali region: Adadle, Kebridahar, West Imey, Dolo Addo, Elkere, Debawayin, and Bokolmayu.⁴ Given that the final survey took place in 2024, the results capture effects more than one year after the end of the SIPE programme with a budget of \$5.6 million by the Government of Sweden and the Swiss Agency for Development and Cooperation.

4. **Evaluation objectives:** The evaluation was commissioned by WFP Country Office in September 2023 to serve the dual and mutually reinforcing objectives of accountability and learning. The evaluation provides impartial evidence on assessment of SIPE performance and results to its internal and external stakeholders and partners. It will also identify the reasons why certain results occurred or did not occur, draw lessons, derive good practices and provide pointers for learning for SIPE experience. The evaluation followed the guidelines outlined in WFP's Decentralised Evaluation Quality Assurance Systems (DEQAS). Considerations of Gender equality and empowerment of women are important elements of the evaluation.

5. This evaluation will also provide evidence-based findings, conclusions, and recommendations to inform WFP's future operational and strategic decision-making. The findings will be actively disseminated, and the lessons will be incorporated into relevant recommendations for consideration by WFP. As outlined in the ToR, the evaluation will analyse how gender, equity and wider inclusion objectives and GEWE mainstreaming principles were included in the SIPE programme design, and whether the programme has been guided by WFP and system-wide objectives on GEWE. The gender, equity and wider inclusion dimensions will be integrated (insofar as possible) into all evaluation criteria as appropriate.

6. The expected users of the evaluation are WFP CO, the WFP Regional Bureau in Nairobi (RBN), the Federal Government, the Somali Regional Government, implementing partners, academics and researchers working on pastoralist communities.

7. **Evaluation stakeholders:** This evaluation sought the views of, and to be useful to, internal and external stakeholders. During the inception phase, a broad range of beneficiaries and other stakeholders were identified, mapped and interviewed, to ensure key stakeholders were consulted during inception, data collection and reporting phases of the evaluation.

⁴ The selection of seven Woredas was based on inception phase consultations with stakeholders. The remaining four Woredas, out of 11 total Woredas, saw only one year programme implementation and would therefore not be fully representative of the programme performance and results

8. Evaluation team: This evaluation was implemented by the Center for Evaluation and Development (C4ED), including a gender-balanced team of national and international evaluators knowledgeable about the national and regional contexts. The core team consisted of Prof. Dr. Markus Frolich (team leader), and evaluation team members Dr. Atika Pasha, Dr. Mohammed Seid Hussen, Ms. Nolawit Teshome, Dr. Cherkos Meaza and Yebelay Berhan. In addition, Dr. Giulia Montresor from the University of Verona, Ms. Johanna Kern and Ms. Elisa Sanz from C4ED assisted with quality assurance.

1.2. Context

9. Pastoralism and agro-pastoralism (PAP) are the main sources of livelihood for 12-15 million Ethiopians, constituting 14-18% of the Ethiopian population (PFE, 2006). PAP communities are generally considered to be nomadic, relying primarily on livestock rearing, and supplementing their income through farming. These communities contribute significantly to regional, national and international livestock markets. Livestock, predominantly sourced from PAP areas, represents a substantial part of Ethiopia's economy, accounting for 30-50% of the agricultural Gross Domestic Product. It is estimated that 44.3% of the national livestock population and 100% of the camels are reared in the pastoral lowland grazing areas (Shapiro et al. 2017).

10. PAP communities live in 61% of Ethiopia's total land area, with 97% residing in lowland areas of the Afar, Somali, Oromia, and Southern Nations, Nationalities, and People (SNNP) regions. The entire Somali region is classified as PAP, comprising nearly half of the total pastoralist population, (Mohamed, 2019; Gebremeskel et al., 2019). Despite a relatively low poverty rate of 22.4% (based on a monetary measure of poverty, which is below the national average of 23.5%), the region has a high proportion of ultra-poor people (8.4%) who live below the poverty line (World Bank, 2020). In addition, the region lags behind others when it comes to non-monetary measures of poverty. For instance, while the country's overall primary school net enrolment rate is 100%, it drops to 73% in the Somali region (UNICEF Ethiopia, 2019). Dropout and repetition rates are also significantly higher in the region. The region has the highest rate of malnutrition among children under five years old, with 23% being wasted, compared to the national average of 9.9% (Geletaw et al, 2021). Additionally, about 27% of children in the region are stunted and 29% are underweight. In particular, Ethiopian women experience low access to essential services. Education levels are strikingly low, with 75% having no formal education or incomplete primary education. Healthcare access is equally concerning—less than half (48%) of births occur in a health facility, where post-natal check-ups are only received by 35% women (EPHI and ICF, 2019). In the Somali region, the share is even lower at 23% of women having delivered in a health facility and only 10% receiving post-natal care thereafter. Similarly, around 87% of women have either no formal education or only some primary education (EPHI and ICF, 2019). The region also has the highest prevalence of female genital mutilation/cutting (FGM/C) in the country, with 99% of women aged 15 to 49 subjected to this harmful practice (UNICEF Ethiopia, 2022).

11. The increasing effects of climate change have further exacerbated living conditions in the region, given the high dependence of the Somali PAP communities on rains. Particularly, the region is subject to frequent, severe and prolonged droughts, resulting in the loss of grazing resources and widespread mortality of pastoral herds. A notable instance of this was the drought of 2022, following two severe droughts in 2010-11 and 2016-17, which has been classified as the worst in four decades. As a result, small and vulnerable pastoralists are often pushed into poverty and may even lose their herds altogether, jeopardising their traditional livelihoods. As of early 2023, it was estimated that this drought affected over 3 million people and left over 4.5 million livestock dead since late 2021 (Addis Standard, 2023). This high level of climate vulnerability puts the Somali population's main sources of consumption, income, and savings at risk, thereby severely affecting their food security and overall resilience. A 2019 study by the Integrated Food Security Phase Classification (IPC) found that approximately 1.25 million Somalis experienced a high degree of food insecurity. The pilot SIPE endline evaluation, conducted in 2019, found the total Household Food Insecurity

Access Score (HFIAS)⁵ score to be 12.98, with nearly 90% of the households reporting fewer than three meals per day (HFIAS Q6) and smaller meals than needed (HFIAS Q5) (WFP, 2019).

12. In PAP communities, women face a unique set of challenges, often exacerbated by their roles within households and limited access to decision-making spaces (Behnke, R. H., & Kerven, C. 2013). While the general population in these areas is vulnerable due to climate variability, food insecurity, and limited access to social services, women fare worse on most social indicators compared to men. Female-headed households are at higher risk of poverty, with limited access to land ownership and fewer opportunities to diversify income sources. These households rely more heavily on social protection programs like PSNP, as they are less likely to engage in income-generating activities such as livestock trade, which is predominantly male-controlled. Male-headed households, by contrast, tend to have broader access to resources, education, and market participation, giving them an economic advantage that translates into better access to healthcare, food security, and coping mechanisms during crises.

13. Youth and children in PAP areas are also highly vulnerable. Children, particularly in female-headed households, experience elevated levels of malnutrition, poor access to education, and greater exposure to food insecurity. Female children may face additional barriers, such as early marriage and gender-based violence, further complicating their access to education and healthcare. Ethiopia's National Policy on Women advocate for gender equity, youth inclusion, and children's rights. However, addressing these compounded vulnerabilities requires targeted interventions and policies that consider the intersecting challenges faced by women, youth, and children in PAP communities.

14. Over the past three decades, the Government of the Federal Democratic Republic of Ethiopia (GoE) has been committed to the development of PAP areas. The 1995 Ethiopian Constitution, under Article 40 (5), bestows upon pastoralists the right to free land for grazing and assures that they cannot be involuntarily displaced from their lands. Additionally, it guarantees, under Article 41(8), that pastoralists have the right to fair prices for their products. Furthermore, in 2020, the GoE amended the Pastoral Development Policy, to pursue policies that were more appropriate for drylands and in line with the pastoralists' needs. The Climate Resilient Green Economy (CRGE) Strategy seeks to achieve a middle-income status by 2025, while building resilience to climate change, particularly in regions prone to drought and other environmental shocks. The National Adaptation Plan (NAP), approved in 2022, also plays a key role in safeguarding PAP livelihoods by strengthening agricultural systems, enhancing water and food security, and improving veterinary and animal husbandry services. These policies aim to equip PAP households with the resources to cope with climate change while ensuring sustainable economic growth.

15. In addition, Ethiopia's development agenda for PAP areas aligns closely with global frameworks such as Agenda 2030 and the Sustainable Development Goals (SDGs). Ethiopia's 2022 Voluntary National Review (VNR) of the SDGs highlights the country's commitment to inclusive and sustainable development, particularly in poverty eradication (SDG 1), food security (SDG 2), and climate resilience (SDG 13). The government has integrated these global objectives into its national strategies, including the 10-year development plan (2021-2030), with special attention to vulnerable PAP communities. The 10-year prospective plan (2021-2030) also outlines a comprehensive strategy to tackle socio-economic inequalities and environmental degradation in PAP areas by increasing investments in infrastructure, education, health, and social protection programs. These endeavours have been supported by key development partners such as the World Food Programme, International Livestock Research Institute (ILRI), World Bank, African Development Bank, International Fund for Agricultural Development, and USAID. In an effort to further advance the PAP's development agenda, the

⁵ The Household Food Insecurity Access Scale (HFIAS) is a tool used to measure the severity of food insecurity experienced by households. It focuses specifically on the access component of food insecurity, meaning it assesses a household's ability to acquire enough food for its needs. The HFIAS is a standardised tool that allows for comparisons across different populations and contexts.

Ministry of Irrigation and Lowland Development was established in 2021. The development of pastoral areas and the livestock sector is a major focus of Ethiopia's Climate Resilient Green Economy (CRGE) Strategy, National Adaptation Plan (NAP), and the 10-year prospective plan. Specifically, NAP mentions enhancing veterinary services and improving breeding and feeding systems. Despite recent efforts by the Ethiopian government, such as establishing the Ministry of Irrigation and Lowland Development, challenges remain in aligning national policies with the unique needs of PAP regions.

1.3. Subject being evaluated

16. The WFP ETCO has advanced financial protection for PAP communities through the SIPE programme (2018-2022), as an avenue for building resilience to extreme weather events. The total budget for SIPE was USD 5.6 million, co-financed by the Government of Sweden and the Swiss Agency for Development and Cooperation (WFP, 2019).

17. SIPE was initially launched in 2018 with a planned duration of five years. It was piloted in three districts (woredas) of the Somali Region and, by 2021, expanded to benefit nearly 29000 households (out of planned 30000) in 11 woredas (see Figure 1). Of these, 82% were headed by men and only 18% were female headed.⁶

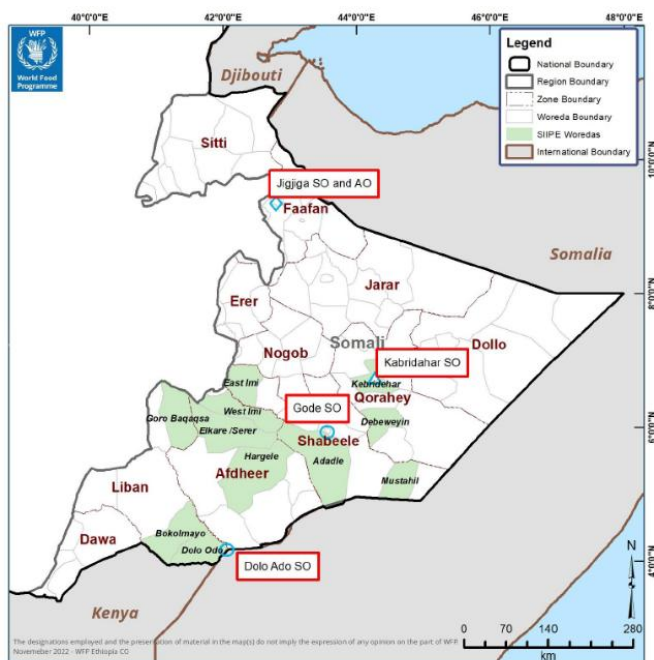


Figure 1. Map of SIPE Kebeles (green) as in ToR

Source: Evaluation team's elaboration based on information from WFP

18. SIPE aims to strengthen the adaptation and resilience of Somali pastoralist households by insuring them against drought-related livestock risks. The intervention consisted of three main parts: fully subsidised insurance coverage for 5 Tropical Livestock Units (TLUs), enrolment in public activities for able-bodied members of insured households, and financial literacy training for beneficiaries. The insurance was designed to enable pastoralists to respond to the onset of severe droughts and loss of pasture cover and grazing

⁶ Information found in the Ethiopia CO: Post Distribution Monitoring Report (presentation), which compared the 3 years from 2020-2022. It is to be noted that the initial phase of the programme in 2018-2019 registered 5001 households with 54% of the beneficiaries comprising women headed households (WFP, 2019b)

reserves by purchasing supplementary livestock feed, water, and veterinary inputs to keep their core livestock alive. The intended impacts of the programme were:

- Reduced pastoralists households' vulnerability through improved resilience to drought shocks and sustainable food security;
- Enhanced pastoralists' livelihoods and community resilience through the creation of Community-based Drought Risk Management (CBDRM) assets;
- Improved confidence and wellbeing of individual households through SIPE's protection; and
- Increased insurance awareness and financial literacy.

19. The eligible beneficiaries for SIPE were defined as pastoralist households owning 5 to 11 TLUs and already participating in the Productivity Safety Net Programme (PSNP)— Ethiopia's public works programme, which provides cash or food payments in exchange for participation in public works. Each beneficiary household participates in the PSNP public works scheme for extra days, as a contribution to the insurance premium. Insurance payouts were triggered during severe droughts, with a maximum of four payouts per year, in two different time windows during the two rainy seasons of Gu (March to June) and Deyr (October to December). These payouts served to help beneficiaries purchase supplementary animal feed, veterinary services, water, and other vital inputs needed to keep their livestock alive. These payouts serve to help them purchase *supplementary animal feed, veterinary services, water, and other vital inputs* required to keep their livestock herds alive.

20. Additionally, SIPE provided livelihood support activities such as financial literacy and entrepreneurship training, alternative income generation, and access to savings groups and loans. SIPE also aimed to help in setting up Village Savings and Loan Associations (VSLAs) in the region to further support the beneficiaries. This would give pastoralists greater access to social support services, which could foster livelihood diversification, increase investments in productive assets and enhance savings. Overall, this would lead to improvements in their income stability, food security and resilience to shocks in the long term.

21. In addition to internal donor funding, WFP established strong partnerships with key stakeholders at both the federal and Somali regional levels, including the Ethiopian National Meteorological Agency, the Somali Regional Bureau of Agriculture and Natural Resource Development (BoANRD), the Bureau of Livestock and Pasture Development (BoLPD), and Mercy Corps. The regional government acted as the policyholder for beneficiaries, while insurance companies, via the Somali Microfinance Institute (SMFI), delivered payouts to mobile bank accounts. SIPE also supported beneficiaries in setting up mobile bank accounts and provided temporary plastic PIN cards in areas lacking Ethio telecom coverage. Additionally, WFP strengthened its collaboration with Mercy Corps to improve market access for products and services such as veterinary care, business training, and fodder production, while also promoting livelihood diversification through sustainable livelihood groups, financial literacy, climate-smart irrigation, entrepreneurship training, and access to loans.

22. Through these activities, SIPE aimed to support vulnerable pastoralist households against climate change-induced shocks (prolonged droughts), to prevent them from losing their main source of livelihood. The strategic objectives, outcomes and outputs follow the programme's Theory of Change (ToC— see Annex X: Reconstructed Theory of Change) and are integrated into a broader results framework for Innovative Approaches to Building Resilience — see Annex XI: Results Framework/Line of Sight. The main outcome, output and assumptions linked to the SIPE are summarised below.

23. Outcome Statements: The key outcomes intended by the SIPE programme include increased stable incomes for pastoralists, reduced livestock deaths, and increased livestock productivity. The adoption and mainstreaming of livestock insurance as a social support tool, both at federal and regional levels, was also a major outcome, alongside the scaling and commercialization of the insurance program. Further outcomes focus on the pastoralists' increased engagement in alternative livelihoods and access to supplemental feeds and veterinary services.

24. Output Statements: The programme's outputs included increased livestock insurance coverage for

pastoralists, the development of appropriate insurance products, and increased financial and livestock insurance awareness among pastoralists. Additional outputs were related to developing alternative livelihood options, pastoralists' access to vital infrastructure, and capacity-building efforts around insurance services, which were to be facilitated by partnerships with the private sector and government.

25. The success of the SIPE programme hinged on several key assumptions. These include minimising the basis risk of the index, ensuring that the insurance delivery systems are contextually appropriate for pastoralists, and having partnerships and platforms that can attract the right partners for capacity building. Additionally, government prioritization of livestock insurance as a social protection tool was assumed, along with the identification and resolution of private sector bottlenecks in participating in livestock insurance. Other assumptions focused on ensuring pastoralists are open to new livelihood approaches and that insurance companies find it profitable to invest in meso-level insurance products.

26. In line with the planned logical framework, pastoralists gained access to livestock insurance products and opportunities to enhance their financial and livestock insurance awareness. For example, in 2021, the WFP partnered with insurance companies to facilitate a payout of USD 92,709 to 2,876 pastoralist households during the Gu season (March to June). In the following year, during the 2022 Gu season, they facilitated a payout of 14,462,778 Ethiopian Birr (approximately USD 272,882) to 2,475 households. By the end of 2022, SIPE beneficiaries had irrigated around 508 hectares of land and constructed canals, contributing to greater resilience against climate shocks. Additionally, beneficiaries received training in financial literacy, income diversification, access to veterinary services, and the provision of seeds and fodder, in line with the intervention design.

27. The 2022 Results Measurement Framework includes several indicators that are relevant to the outcomes and outputs defined in the ToC, measuring achievements in mid-2022, against a baseline in 2021. A short analysis of the framework suggests that several indicators were either not corroborated by any data (of host, refugee or both populations), did not have baseline data to set targets, or did not have reliable numbers to assess the actual performance (for 25 out of total 47 outcomes or outputs measured). However, from the remaining indicators, the systemic targets were often not met, but numerous improvements can be observed at the household level, especially related to livestock insurance. A more detailed analysis of the 2022 Results Measurement Framework is presented later in the report and is also found in the inception report for this evaluation.

28. Beside the shortcomings indicated by the Results Framework of the programme, the evaluation of the pilot SIPE (2018-2019) also showed that challenges were faced due to conflicts in the Somali region (WFP, 2019a). This conflict resulted in delays in the implementation of specific SIPE activities, including public work activities, and restricted movement of the pastoralists. Further the COVID-19 pandemic significantly disrupted planned capacity-building activities, particularly training programmes in areas such as climate-smart agriculture, vocational skills, and savings and loan associations. Key activities such as training for new Community Animal Health Workers (CAHWs), refresher courses, and public works under the Insurance for Work (IfW) scheme faced delays, and additional hand tools were required due to restrictions on tool-sharing. To mitigate these challenges, several solutions were implemented. These included limiting the number of trainees while adhering to social distancing and health protocols, postponing non-urgent trainings, and supporting existing Village Savings and Loan Associations (VSLAs) in smaller groups. Remote monitoring was also introduced, and new VSLA formations were suspended in line with emergency guidelines (WFP, 2020a; WFP, 2020b).

29. Gender and equity were also mainstreamed in the SIPE programming, with the following targeted actions and considerations, as gleaned from programme documentation:

- i. Exemption from Public Work: The programme incorporated provisions to exempt pregnant and lactating women from participating in natural resource management tasks within the insurance for work (IfW) activities.
- ii. Data Collection and Monitoring: Monitoring checklists were designed to address gender issues,

and the programme committed to collecting gender-disaggregated data.

- iii. **Financial Inclusion:** The program aimed to improve financial inclusion, particularly among women. All SIPE beneficiaries were required to open mobile telephone bank accounts, and training was provided on using these accounts for transfers and purchases. This initiative empowered women to access financial services independently and contributed to their financial literacy.
- iv. **Mobile Banking for Safety and Security:** The use of mobile telephone banking also had a positive impact on women's safety and security. It allowed them to move securely without carrying cash, reducing their vulnerability to attacks and theft, a significant concern in the region.
- v. **Support for Women's Savings and Credit Cooperatives:** Smallholder support activities under SIPE included bolstering women's savings and credit cooperatives, as well as women-only primary cooperatives. These initiatives provided economic opportunities for women in areas such as petty trade, fattening, dairy, sheep/goat rearing, and crop production.

30. Through this programming approach SIPE recognised the role of women in pastoral households and acknowledged the pivotal step of including women as beneficiaries, to ensure a reduction in the disproportionately negative impact on women and children.

1.4. Evaluation methodology, limitations and ethical considerations

31. **Evaluation methodology:** The evaluation team has employed a gender-sensitive mixed-method approach, incorporating qualitative data into a quasi-experimental quantitative evaluation design, specifically the Inverse Probability Weighting with Regression Adjustment (IPWRA). Within this framework, the qualitative data set provides a supportive, complementary role to the quantitative data. The premise of this design is that a single data set is not sufficient to answer all the evaluation questions (EQs) and that each type of question requires different types of data (Creswell et al., 2006). Accordingly, evaluation questions were addressed exclusively through either qualitative and/or quantitative means and explored from different angles. A parallel, one-phase approach was used, where both quantitative and qualitative data were collected and analysed simultaneously. The detailed evaluation matrix can be found in Annex IV. Evaluation matrix.

32. Human rights and gender equity considerations are incorporated throughout the evaluation, through targeted sub-questions and indicators, as well as ethical and gender-sensitive data collection and analysis (for example, through disaggregated description of indicators by gender of household head). Disability was not a focus of the SIPE programme and was therefore not considered within the evaluation design.

33. The evaluation team developed the EQs outlined in the ToR following SIPE's ToC and aligned them to the Organization for Economic Cooperation and Development (OECD) Development Assistance Committee (DAC) evaluation criteria.⁷ For ease of analysis and reference, the EQs have been grouped into the main dimensions of relevance, effectiveness, efficiency, impact, sustainability, cross-cutting aims and lessons.⁸

34. The evaluation addresses the following EQs:

- EQ 1: How appropriate was the programme design? (**Relevance**)
- EQ 2: To what extent has the SIPE programme achieved its intended objectives and what

⁷ The original EQs in the ToR are included within Annex I. Summary Terms of Reference, under Table 24.

⁸ C4ED was also responsible for a previous endline evaluation of the pilot SIPE programme (2018-2019). We actually relied on most of the analysis within to set up our design and questionnaire. Many of the recommendations (for instance related to expansion of insurance coverage, improvement in awareness, gender mainstreaming in capacity building, etc.) were the focus of this evaluation and were sadly found to be key shortcomings reported by beneficiaries in the current programme version as well

were the main factors that facilitated or constrained achievement of results?
(Effectiveness)

- EQ 3: To what extent have resources been allocated and utilised in an efficient manner in the delivery of SIIPE objectives? **(Efficiency)**
- EQ 4: To what extent and how has SIIPE affected productive decisions and livelihoods of beneficiary households? **(Impact)**
- EQ 5: Have programme activities and services led to improved awareness, understanding or use of insurance and financial tools and products? **(Impact)**
- EQ 6: To what extent (and how) has SIIPE strengthened pastoralists' ability to keep their animals alive? **(Impact)**
- EQ 7: Has the food security of pastoralists and their families improved due to the programme? **(Impact)**
- EQ 8: To what extent are the programme results sustainable? **(Sustainability)**
- EQ 9: What lessons can be learned from this programme? **(Lessons)**
- EQ 10: To what extent did the programme consider gender equality and women's empowerment, capacity strengthening, accountability to affected populations, protection, and the triple nexus? **(Cross cutting)**

35. Data collection methodology and sampling frames: Based on the ToC (see Annex X: Reconstructed Theory of Change) and all relevant EQs, the evaluation team developed the data collection tools: a household survey questionnaire for the quantitative data collection, and in-depth Interviews (IDI), key informant interviews (KII) and focus group discussions (FGD) guides for the qualitative data collection.

36. For the quantitative data collection, the evaluation team used geospatial data and matching techniques to select a comparison group from villages (kebeles) that were similar to the treatment group.⁹ Due to budget constraints, the programme could not encompass all kebeles within the targeted woredas. For instance, only six out of 20 kebeles in the region of Kebridahar and six out of 18 kebeles in the region of Elkerere were included in the programme. The non-programme kebeles within the targeted woredas served as the sample for the selection of the comparison kebeles, to assess the impact of the SIIPE programme. This resulted in 49 treatment kebeles and a pool of 155 potential comparison kebeles. Using logistic regression based on the aforementioned geospatial information, the evaluation team derived a propensity score for each of the 299 treated and non-treated kebeles. Thereafter, a one-to-one nearest neighbour matching method was employed, based on the estimated propensity score, to identify the most similar kebele in the comparison group for each of the 49 kebeles in the treatment group. Through this approach, the evaluation team selected 98 kebeles (49 treatment kebeles and 49 comparison kebeles) from 7 woredas. The results of the kebele selection through matching are provided in Table 25 to Table 27 in Annex III. Methodology.

37. Within the treatment and comparison kebeles, two frames were used to sample households. For households residing in treated kebeles, the list of beneficiary households was obtained from WFP. For households residing in comparison kebeles, the list of households was obtained from the 2018 PSNP lists shared by the kebele food security task force. After that, 22 households per kebele were randomly selected

⁹ This data included variables such as 2020 population size, 2016 health indicators, number of buildings, 2016 road access, number of schools, number of water facilities, distance from the nearest Woreda or Zonal town, and rainfall for 2023. These variables were selected because they represent the socio-economic and socio-demographic characteristics of each Kebele and indicate their propensity for selection into the program.

for an interview. Comparison households, after the random selection, were asked filtering questions to ensure that they were comparable to the beneficiaries. The filtering questions were related to the inclusion and exclusion criteria used to select the list of beneficiaries when the programme was about to be implemented. At the end of the data collection a total of 2142 surveys were collected from pastoralist households. Since the entire sample consisted of pastoralists households, the term households or beneficiaries will always refer to pastoralist households in the remainder of this report.

38. For the qualitative component, the evaluation team used purposive sampling to select woredas and interview participants. Overall, 35 individual interviews and group discussions were conducted. Specifically, ten IDIs with male and female beneficiaries and sixteen KIIs with programme implementers and stakeholders including focal persons from governmental and non-governmental institutions from East Imey, Adadle, Kebridehar woredas, as well as stakeholders in Gode, Jijiga and Addis Ababa were conducted. Additionally, eight FGDs, with gender-segregated groups of male and female beneficiaries and one FGD with programme staff were conducted according to plan. Even though the research team had planned to interview beneficiaries from four woredas, this was later changed to three woredas due to the risk of flooding in one woreda (West Imey). The sample was thus redistributed to retain the number of initial interviews and discussions planned. Table 1 shows the sample derived from the data collection.

Table 1. List and details of FGDs, IDIs and KIIs conducted for the final evaluation

Tools and Interview Participants	Respondent type	No. of respondents		
		East Imey woreda [Direy kebele]	Adadle woreda [Melkaselah kebele]	Kebridehar woreda [Dalad kebele]
FGD with Beneficiaries	Male beneficiaries	1	2	1
	Female beneficiaries	1	1	2
FGD with programme stakeholders	Programme staff	1 (Virtual)		
Total FGDs		9		
IDI with Beneficiaries	Information-rich cases of beneficiaries (male/female)	3 (male)	2 (male) 2 (female)	3 (female)
Total IDIs		10		
KII with Programme stakeholders	Programme implementers, insurance companies; government officials	16		
Total KIIs		16		
Total discussion and interviews conducted		35		

Note: Own elaboration from the endline data

39. **Data cleaning:** Once the quantitative data collection had been completed, the evaluation team cleaned the data to generate the appropriate indicators and enable subsequent analysis. The data cleaning involved recoding of the “other” categories where possible, reviewing outlier values and checking for the logic of the data (most of which had already been conducted during the data collection). The cleaned quantitative data were used to generate both descriptive and inferential analyses for this report.

40. **Data analysis:** After data cleaning, descriptive analysis was undertaken, using the Student t-test and simple visual aids such as bar graphs or pie charts, to underline sample characteristics and showcase the differences between treatment and comparison group. For the inferential analysis, a second round of matching was used to derive a comparison and treatment group at the individual level. At this stage, the Inverse Probability Weighting with Regression Adjustment (IPWRA) model was used. IPWRA is a double-robust method that models the likelihood of receiving the intervention (treatment model) and estimates its impact (outcome model). It is called a double robust method since it gives a consistent estimate of the treatment effect even if one of the models (treatment or outcome) is mis-specified (Wooldridge, 2010), and it allows for a more flexible and more robust specification than with other matching estimators such as propensity score matching.¹⁰ Using this methodology, the average treatment effect on the treated (ATET) was estimated.

41. The set of matching covariates for the first stage of the IPWRA, including the generation of the propensity scores over which the observations are inversely weighted in the regression adjustment, includes a combination of baseline and endline household information. Many variables were tested to select the final set of matching variables for estimating the propensity scores. The final set of variables include: the baseline total livestock units (cows, camel, and shoats) for the household, the baseline income received from PSNP, the baseline total income of the household, the baseline total number of household assets, a principal component analysis-constructed productive asset index with baseline values, the highest level of education of the household head at endline, as well as an interaction term of the age and work status of the household head at endline. The selection of the final matching variables was driven by factors that influence the selection into the programme, as well as certain household characteristics that may influence outcomes besides the programme selection itself. The results of the matching approach are presented in Annex III. Methodology. The Figure 14 and Figure 15 detail the list of variables used for the matching, as well as the bias reduction through the matching. Through the matching, the reduction in bias is considerable, and the propensity scores between both groups look aligned. There is little scope for observations to be out of common support.

42. Within the IPWRA approach, the evaluation team used the below specification to evaluate the impact of the SIIPE programme on the relevant outcome variables.

$$43. Y_{ic} = \beta_0 + \beta_1 \text{Assignment}_c + \alpha X_{ic} + \varepsilon_c \quad (1)$$

44. where Y_{ic} is the outcome variable of interest for household i , in kebele c . Assignment_c is a dummy variable indicating whether a kebele was assigned to the SIIPE treatment or not. X_{ic} is a vector of variables, including basic socio-economic characteristics (age, educational attainment, marital status, employment status and gender of household head, share of working members in the household, share of female members in the household, number of occupations in the household) at the individual level, in addition to the baseline values of some of the Y_{ic} (retrospectively measured at endline). Throughout, standard errors ε_c are clustered at the unit of treatment, the kebele. Finally, β_1 estimates the ATET effect or the average effect of SIIPE on Y_{ic} for all treated households in the treatment kebeles as compared to untreated households in the comparison kebeles.

45. All qualitative interviews and discussions were audio-recorded, transcribed, and translated. After going through the standard process of quality checks, each piece of qualitative data was coded in an iterative process using the MAXQDA software, based on a coding structure developed according to the pre-existing research questions, key themes, and interview guidelines. Qualitative content analysis was used to analyse the data.

46. The findings of the qualitative research were triangulated with the findings of the quantitative component related to the evaluation questions and the ToC, where applicable. Additionally, Inferential analysis based on

¹⁰ Wooldridge, J. M. (2001). *Econometric Analysis of Cross Section and Panel Data*. MIT Press Books, 1.

IPWRA regressions was corroborated with descriptive results on the outcomes and outputs of the programme.

47. Gender mainstreaming in the evaluation: The evaluation used a gender-inclusive approach as much as feasible. During data collection, whenever possible, efforts were made to make sure that the data collection teams comprised a balanced number of male and female data collectors. During the qualitative data collection, gender-sensitive sampling was employed to ensure the sample was representative of both genders. The evaluation team developed gender-inclusive quantitative and qualitative data collection tools to make sure that there were no questions that reinforced gender stereotypes. In addition, enumerators were trained on gender-sensitive data collection, ensuring they understood how gender norms, power dynamics, and social roles can impact the process of data collection and its results. The quantitative analysis (largely limited to the impact related findings) included female-headed households as a sub-sample (33% female-headed households), compared to the male-headed sample in a descriptive manner. In order to maintain brevity in the main report, these results are not discussed in the main part but can be found in Annex XII. The qualitative analysis consisted of individual interviews and group discussions with (gender-segregated groups of male and female) pastoralists and interviews with SIPE stakeholders and partners as shown in Table 1. The aim is to provide a better insight into those outcomes that cannot be fully captured by quantitative data alone and to report on issues and information from different perspectives. Effectively, EQs 3-7 and particularly EQ 8.4 inform on gender inclusiveness of the programme. Whenever the data allowed, the team looked for differences or disparities between men and women. For instance, in the quantitative method, indicators were disaggregated by the gender of the household head while qualitative data analysis also attempted to capture gender-specific experiences of interview participants. The program's use of gender-sensitive strategies was also an element that was considered during these phases of the evaluation. Gender-specific recommendations were also made to address gender inequalities and promote gender equality based on the findings. Gender was considered as a cross-cutting theme throughout the evaluation process and not just as a separate section.

48. Ethical considerations and safeguards: WFP evaluations must conform to the 2020 United Nations Evaluation Group (UNEG) Ethical Guidelines. Accordingly, the evaluation team was responsible for safeguarding and ensuring ethics at all stages of the evaluation cycle. This included, but was not limited to, ensuring informed consent, protecting the privacy, confidentiality, and anonymity of participants, ensuring cultural sensitivity, respecting the autonomy of participants, ensuring fair recruitment of participants (including women and socially excluded groups) and ensuring that the evaluation results in no harm to participants or their communities. All interviewees were informed of the purpose of the interview, the voluntary nature of their participation, and their right not to answer any of the questions that they did not want to provide, and/or leave the interview at any point in time. Interviewees' verbal informed consent was documented by the evaluation team. To avoid disclosing the identity of the interviewees, all data were treated anonymously. For security reasons, quotes were assigned to categories of respondents rather than individuals. All participants in the data collection activities were provided with information on how to report concerns or ask questions.

49. Challenges, risks and mitigation Strategies: Several risks and challenges were identified, and mitigation measures were adopted as the evaluation was underway. Nonetheless, there were limitations that were faced while evaluating the SIPE programme which cannot be considered as completely mitigated. Table 2 lists the challenges and risks along with the mitigation strategies:

Table 2. List of identified risks, challenges and mitigation strategies

#	Risks and challenges	Mitigation strategies
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1	<p>Sub-par quality of beneficiary lists Due to the nature of the beneficiary list provided by SIIPE programme team used for sample selection, it was not possible to identify beneficiaries with specific vulnerabilities, such as living in a single-parent household or having no household income at the time of enrolment. Other information, such as beneficiaries' disability status, could also not be ascertained from the beneficiary list. For these reasons, it was not possible to design the sampling approach based on these factors.</p>	<p>A random sample selection method was deployed to obtain a representative sample of male and female beneficiaries where the programme was implemented.</p>
2	<p>Misallocated kebeles: During data collection it was found that some kebeles were mistakenly assigned to woredas they did not belong (and therefore differed from our initial sampling plan). For example, eight of the 22 selected kebeles in Serer/Elkare woreda were located outside the designated region.</p>	<p>The team was required to make data collection adjustments, where replacement kebeles were selected from the sample Woredas (not following the matching approach used in the first selection round).</p>
3	<p>Disease outbreak: A cholera outbreak in Debeweyin woreda prevented data collection in that area. With eight kebeles planned for the household survey (five treatment and three comparison kebeles).</p>	<p>The evaluation team, in consultation with WFP, opted to conduct data collection in East Imey woreda instead.</p>
4	<p>Misreporting by respondents: Enumerators noted that a few respondents may have deliberately concealed information, despite explanations regarding the interview's purpose. This could include underreporting income-generating activities or livestock ownership to be perceived as more financially disadvantaged.</p>	<p>In such cases, enumerators relied on observation and potentially sought clarification from households based on their observation. Responses were not changed if probing did not lead to a change in response.</p>
5	<p>Limitations of monitoring and budget data: A short analysis of the results-based framework showed that several indicators were either not corroborated by data from the host, refugee or both populations, did not have baseline data to set targets, or did not have reliable numbers to assess the actual performance (for 25 out of total 47 measured outcomes or outputs). Additionally, all the documentation shared by WFP did not include comprehensive budget information (either by line item, disaggregated by year and region, linked to outcomes and indicators, etc.), which made a proper efficiency and cost-effectiveness analysis impossible.</p>	<p>The evaluation team used the available data to conduct a simplified VfM analysis, instead of a sound cost-efficiency analysis.</p>
6	<p>Limitations of the IPWRA approach: The results of the matching approach intended to account for all observable differences between the comparison and treatment groups at baseline. However, given that the baseline information was based on retrospectively collected data at endline, some of the results might be affected by the recall bias of baseline characteristics. Respondent recall is likely to affect the matching process and the outcome thereof. Simultaneously, we do not expect the recall bias to be systematically very different between the two groups for all</p>	<p>To account for some of these differences, other variables were included that would not be affected by this difference, such as assets, current demographic characteristics and income. This is nonetheless a limitation that was not fully overcome, and the results of the quantitative</p>

	types of variables. The biggest contender for this systematic difference is the total livestock unit variable, which can be differentially tracked between the two groups, as SIIPE households are aware of and were primed to observe livestock numbers due to the livestock insurance.	analysis should be taken in view of this shortcoming.
7	Non-convergence of model for two indicators: The IPWRA model did not converge for the outcome indicators total income from livestock or the total value of livestock sales last year. These variables are usually problematic due to the scale of the outcome being too large (as is the case of income or value of sales).	The results for these two indicators were generated by manually repeating the IPWRA process and including the points estimated from this regression-adjusted model.
8	Missing indicators: During the inception phase, a few changes were made to shorten the household questionnaire, based on comments received about the interview length. One such change resulted in the HDDS related questions being dropped before the data collection. Usually, HDDS uses twelve categories and one day recall, but to shorten the length of the questionnaire, the evaluation team decided to use the FCS categories (nine) to construct the HDDS, removing the HDDS module entirely from the household questionnaire. Near the end of the data collection, however, two other indicators were noted to be missing. These are the indicator Percentage of beneficiaries disaggregated by gender who report satisfaction with the program's approach design under EQ1.1, and Nutritional status of children under 5 years under EQ 7.1.	The indicator under EQ 1.1, upon discovery, was immediately covered through the qualitative interviews, but the other indicator for the nutritional status of children is missing from this evaluation.

2. Evaluation findings

2.1. Relevance (EQ 1)

Finding 1: The SIIPE programme was highly relevant to the WFP's goal of providing long-term, sustainable solutions to pastoralists in Somali region. Beneficiaries appreciated the insurance payouts for their timely support but noted the insufficiency of payouts to cover all livestock-related expenses. Additional challenges were noted in the complexity of the enrolment process (EQ 1.1).

According to Ethiopia Pastoral Development Policy and Strategy¹¹ which was approved in 2020, the weakness of credit and animal insurance services and lack of strong early warning and response mechanisms were mentioned among the major problems that hindered pastoralists from maximising the use of their animal

¹¹ <https://sdr-africa.com/wp-content/uploads/2022/11/PastoralPolicyofEthiopia.pdf>

resources. In this national policy and strategy document (under strategy 1, sub-section G), developing livestock assets of pastoralists and reducing their vulnerability to disaster has been included as one of the multiple strategy implementation activities. This included the development of index-based animal insurance services which directly align with the SIPE.

The programme was implemented with the inclusion of marginalised and underrepresented groups working with a balanced percentage of male and female beneficiaries while also involving youths and other vulnerable groups, including people with disabilities with different intervention schemes. Selection of beneficiaries was balanced with the VSLA component involving more women than men.

50. The SIPE programme was found to be greatly beneficial to the communities that reside in drought-prone areas. The response of the key informant interviewees supported this finding, stating that the SIPE programme changed the focus of the support system from humanitarian and lifesaving to a life-sustaining and developmental approach. The programme aimed to reduce the death of livestock during drought and to help households become more resilient. Therefore, key informants suggested that the approach was groundbreaking, timely, and aligned with the local situation and context. As a result, most beneficiaries were happy with the programme.

SIPE programme thus is designed as part of the shift from saving lives, to saving lives and changing lives. This implies that the programme is beyond lifesaving and life-sustaining activities, and it promotes resilience and climate adaptation to bring sustainable ways of building food security and self-sufficiency. In addition, financial inclusion is also a key element, as the insurance helps vulnerable pastoralists and agro-pastoralists to have sustainable ways of accessing finances, which is also a way to build resilience. (WFP CO staff)

51. Many beneficiaries disclosed that they decided to enrol in the programme after carefully considering its benefits and how it would save their animals' lives. According to the beneficiaries, there had been numerous droughts in the programme areas, which had made the community members extremely susceptible and caused them to lose a large number of cattle and other livestock. As a result, the SIPE programme was able to make a significant contribution in their lives.

We are happy; the insurance payout was helpful and benefited greatly from the programme. We only want them to provide more payouts for us. We joined this programme thinking it would benefit us and indeed benefited from it. We received that money (payout) when we needed it, while our livestock were suffering. (Adadle, Female beneficiary)

We did not have any complaints and we are satisfied with the program. it was helping us, and we want them to continue helping us as they were. (East Imey, male beneficiary)

52. However, beneficiaries also expressed that the insurance payouts were insufficient for them to cover the livestock-related expenses they incur. They stressed that the money they received was not enough to purchase fodder, other inputs and veterinary service expenses, especially considering the price fluctuation/inflation.

We heard about it (the programme) and we joined because we understood it to be very helpful and a good idea. We could say that the money was very helpful for us, and we used what we had received from them properly. However, we need more. It is very small, and we are looking forward to getting more support in the future from this programme and from the government. (Adadle, female beneficiary)

It was inflation time and I used to buy fodder for 1100 birr, previously one bar of grasses was sold for 200 birr but, currently, it is about 400 or 500 birr. And concerning water, I used to buy a barrel of water for about 30 birr, it is currently sold for about 50 birr. (Male beneficiary, Adadle)

53. Within the group of households that purchased insurance, perceptions of insurance reported in the endline quantitative data are described in Table 3. Overall, 51% of the total sample found the insurance enrolment process difficult, and the premium too high. Around 47% of the households reported that the insurance compensation was lower compared to the actual loss.¹² However, non-beneficiary (or comparison) households were more likely to perceive the paperwork associated with compensation to be extensive (9 percentage points higher) as compared to SIPE beneficiary (treatment) households (44% versus 35%). No other perceptions were found to statistically differ between the two groups (see Box 1 for explanations on statistically significant differences). The findings still corroborate the relevance and appropriateness of the programme. A low 25% of the sample felt that the insurance contract was favourable to the insurance company, and as high as 71.5% confirmed that the insurance is valuable in terms of time and money.

Box 1. The quantitative analyses here show differences between the beneficiary and non-beneficiary samples using Student t-tests. These tests calculate p-values, which show the probability of obtaining a result (column 4 named Difference) at least as extreme as observed, assuming there is no difference between groups. If the p-value is very small, we reject the hypothesis that the observed difference is due to random chance and can be confident that this difference exists. Researchers set different thresholds for the p-values, where commonly used thresholds in the social sciences are 0.01, 0.05, and 0.1, corresponding to 99%, 95%, and 90% confidence levels in the results.

Table 3. Differences in perceptions related to insurance in sample

	(1) Full sample	(2) Treatment	(3) Comparison	(4) Difference
Insurance enrolment process is difficult	50.7 (50.0)	51.5 (50.0)	47.9 (50.1)	3.6
Insurance premium is high	50.7 (50.0)	50.9 (50.0)	49.7 (50.1)	1.2
Insurance is valuable in terms of time and money	71.5 (45.2)	71.2 (45.3)	72.4 (44.8)	-1.2
Insurance compensation is low with respect to actual loss	46.7 (49.9)	46.3 (49.9)	48.4 (50.1)	-2.2
Insurance contract only favours the insurance company	25.5 (43.6)	24.3 (42.9)	30.9 (46.4)	-6.6
Paperwork to be compensated is extensive	36.5 (48.2)	34.8 (47.7)	43.8 (49.8)	-9.0**
Number of observations	986	748	238	

Note: The table presents summary statistics for the 2142 study households interviewed. Columns (1), (2) and (3) present sample means and standard deviations (in parentheses) for households in the full sample, the treatment group and the comparison group, respectively. Column (4) reports the difference in group means with stars indicating the result of the t-

¹² During a review round, we received a comment that affirmed that basis risk (perceived or actual variance between what is indicated as the payout versus what is expected to be insured) was also observed during implementation. The programme made various efforts to ascertain the causes of this risk and to address them through awareness raising and continued innovation in the insurance product. However, these strategies were not implemented, and the low perception of the product's accuracy persisted amongst beneficiaries.

test for the comparison of means. Significance stars: * $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$.

Finding 2: The SIPE programme effectively engaged various stakeholders, including government ministries, ILRI, insurance companies, Mercy Corps, and community representatives, to facilitate implementation and payout processes. Community consultations informed the feasibility study and led to design adjustments. (EQ 1.2).

54. The programme successfully involved the Federal Ministry of Agriculture (MoA) and the Somali Regional Bureau of Agriculture and Natural Resource Development (BoANRD), the Somali Regional Bureau of Livestock and Pastoralists Development (BoLPD), the International Livestock Research Institute (ILRI), private and public insurance companies, Mercy Corps and Somali Microfinance (SMF), and community representatives. Government stakeholders coordinated and facilitated the programme implementation process, serving as a liaison between the WFP and the community.

55. According to key informants, ILRI and WFP SIPE programme coordinators conducted intensive discussions with community representatives and other stakeholders in three key areas as part of the feasibility study: the area's bio-physical context, the socio-economic context including the livelihood and the delivery mechanism. The community representatives also assisted with area mapping and identification of locations.

56. In addition to conduct the feasibility study, ILRI supported the programme by developing training materials and training all stakeholders in livestock insurance. Insurance companies involved in the programme included Niyala Insurance, Ethiopian Insurance Corporation, Africa Insurance, and Oromia Insurance Company. Additionally, Shebele Bank (formerly Somali Micro Finance (SMF)), contributed to the programme by managing the delivery channel and digital banking, facilitating the payment of insurance payout to beneficiaries.

57. There were also instances where the consultative discussions with community representatives and kebele- and woreda-level administrative officials led to changes in the programme design, according to key informants. For example, it was mentioned that the SIPE programme initially proposed the criterion of having five TLUs and less as a membership criterion. However, this was later modified to 5-11 TLUs as a result of the consultative discussions with community representatives.

58. This is a key improvement over the pilot SIPE programme (2018-2019), where limited community engagement was observed as a significant shortcoming. Given the varied benefits observed in the current programme findings, community involvement and engagement appear to be a continued recommendation to improve programmatic relevance and success.

2.2. Effectiveness (EQ 2)

Finding 3: The SIPE programme reached 94% of its target 30,000 beneficiaries. Timely receipt of payouts was an issue, with only 42% of the beneficiaries reporting timely payments. Although additional public work days did create valuable community assets, maintaining these assets faced challenges due to the labour and capital-intensive nature of the work, lack of commitment from some community members, and the need for additional budget allocation (EQ 2.1 & EQ 2.2).

59. The 2021 Updated Results Measurement Framework Annual Report shows that the SIPE programme reached close to 94% (28297 of planned 30000) beneficiaries (outcome 2.1 in the Framework). The second indicator related to the timely receipt of the payouts was not a measured output and therefore not found in the Framework. Moreover, the Framework shared with the evaluators did not include yearly information on targets and achievements, to indicate timely delivery of the programme.

60. For other indicators, the Results Measurement Framework shows that fewer households appear to have insufficient food consumption (44%, as opposed to the target change of 61%). Moreover, the number of households practicing emergency coping strategies has considerably reduced (30%, as opposed to the target of 62%) but a larger number of households are practicing crisis coping strategies (target set at 6% but at 33%). Under outcome two, the targets were met with regards to the number of households that i) are covered by insurance, ii) reported using of mobile money services, iii) declared willingness to use livestock insurance and iv) have access to animal health services. Conversely, the framework suggests that targets were not met in terms of i) access to inputs, ii) Community-based Animal Health Workers (CAHWs) trained, iii) Village Economic and Social Associations (VESAs) established /strengthened or iv) on the early warning and response related outcomes 3 and 4 the warnings itself or the associated complaint mechanism. These numbers were often aggregated and do not allow a gendered analysis.

61. Given the lack of analysis possible from the Results Measurement Framework, the endline household data was used to extend the analysis on effectiveness of the programme. Respondents were asked if they had heard of livestock insurance before, and if they acknowledged some awareness, they were then asked if they had purchased any livestock insurance. The data suggests that a low 29% of the total beneficiary sample claimed to have purchased insurance. It is reassuring that the number in the non-beneficiary group is much lower (3.6%), implying that the reporting bias is limited in this case. Of the total beneficiary sample (1050 households), 78% (841 households) had heard of livestock insurance, whereas only 35% of the comparison sample (1063 households) responded positively to this question. Therefore, of the sample that knew SIPE (841 households), around 36% had also bought livestock insurance, compared to only 10% in the comparison group.

Table 4. Household data on insurance knowledge and coverage

Group	Have some knowledge			Have enrolled in insurance		
	Total sample	Obs.	% of total sample	Obs.	% of knowledge sample	% of total sample
Comparison	1063	372	34.9	38	10.2	3.6
Treatment	1050	841	78.2	300	35.6	28.6

Source: The table presents summary statistics for the 2142 study households interviewed at endline.

62. To understand if participants reported receiving the payouts in a timely manner, a related question from the endline was assessed. Table 5 shows that, the share of participants that reported an overly long insurance payout process is around 42%, that is nearly half of the sample did not find the payments arrived in a timely manner.

Table 5. Household data on insurance payout (timely receipt)

	(1) Full sample	(2) Treatment	(3) Comparison	(4) Difference
The length of the payout process is long	41.8 (49.4)	41.7 (49.4)	42.0 (49.5)	-0.3
Number of observations	986	748	238	

Note: The table presents summary statistics for the 2142 study households interviewed. Columns (1), (2) and (3) present sample means and standard deviations (in parentheses) for households in the full sample, the treatment group and the comparison group, respectively. Column (4) reports the difference in group means with stars indicating the result of the t-test for the comparison of means. Significance stars: * $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$.

63. According to programme documents, the programme used a calculation of the monthly cost of feeding for 5 Tropical Livestock Units. This cost calculation was done in consultation with FAO livestock experts and the feeding and water costs were based on FAOs estimates of the nutritional requirements of an adult cow

(1TLU). The monthly cost was averaged at ETB 368, which was then rounded up to ETB 400, per TLU per month. The total sum insured per beneficiary was therefore 5 (TLU) x 400 (ETB) x 7 (months) = 14,000 ETB. In total, under one cover, there will be 0-4 pay-outs in a year per Unit of Area Insured, depending on whether drought has been measured.

64. Beneficiary households participated in the PSNP for additional days as a form of contribution to the insurance premium. IDI and KII participants noted that this public work initiative helped create community assets, including irrigation canals, roads, water wells, public toilets, range land development, as well as tree planting. However, some beneficiaries indicated that they did not participate in public work activities. They associated the public work activities solely with the PSNP. This misunderstanding could be attributed to insufficient information clarifying the difference between activities under the PSNP and those under the SIPE project.

65. The main barriers to the creation and maintenance of community assets, as mentioned by key informants, were related to the labour- and capital-intensive nature of some public works. This challenge was compounded by the lack of commitment shown by some beneficiaries and other community members to work on building and maintaining the community assets. In addition, even when beneficiaries were willing to put on the work, additional budget allocation was required for certain activities. Consequently, some community assets such as irrigation canals and terraces fell out of service.

Finding 4: Factors that facilitated the achievement of SIPE outcomes included strong collaboration between stakeholders, full coverage of insurance premiums, and a focus on protecting livestock, which ensured the effective use of insurance payouts. Constraints included limited collaboration with HDP actors, limited stakeholder understanding of livestock insurance, challenges with satellite readings and payout expectations, accessibility issues with mobile banking and IDs, insufficient payouts to cover both livestock protection and household needs, and mobility limitations due to poor roads, transportation issues, and COVID-19 restrictions (EQ 2.3).

66. One of the factors that facilitated the achievement of SIPE outcomes was the strong collaboration between the stakeholders, which helped to streamline the implementation of the programme. As mentioned above, SIPE involved different stakeholders, especially the government. For instance, involving BoANRD as the insurance policyholder while Ethiopian Meteorological Institute having a role as the claim calculation agent in addition to the involvement of financial and insurance companies, depicts the strong collaboration between the various stakeholders. Collaboration between various Human Development and Peace (HDP) actors, however, was at its beginning stage. Another factor that facilitated the achievement of outcomes was the full coverage of the insurance premium. Some key informants argued that this allowed the programme to reach and assist a large number of beneficiaries, as many with limited financial resources would have been unable to pay for the insurance service themselves. In addition, a few key informants stated that the programme's effectiveness was due to its focus on protecting livestock, the asset most valued by pastoralist communities. This focus ensured that a sizeable portion of the insurance payouts were used for their intended purposes. The following statement from one of the programme beneficiaries illustrates their commitment to effectively use insurance payouts because they prioritise the survival of their livestock.

I have received money for two rounds, and I didn't even give a cent to my family for household expenses. I used that money for the intended purpose and bought fodder to save my livestock. I can't even imagine that there's anyone who uses that money for other purposes while his animal cannot even stand due to starvation. And I suppose that people have used the insurance payout for the right purpose, saving their livestock. (Community leader, Kabridehar)

67. Nonetheless, other beneficiaries reported that the insurance payout for livestock protection was sometimes used to cover basic household needs, because they could not cover these needs on their own

and because there was no other humanitarian and development aid for the pastoralists who faced shocks such as drought, recurrent flooding and crop diseases. Their experience shows the need for establishing a multisectoral approach providing assistance.

68. The novelty of the programme's approach (livestock insurance scheme) also posed a challenge to stakeholder participation. Due to their limited understanding and experience with livestock insurance, insurance companies struggled to fully promote and support the approach. The commitment of government stakeholders was also hindered in some instances by a similar lack of understanding.

69. Another factor identified as a limitation was the challenge in using satellite readings. In some cases, beneficiaries expected payments whenever they experienced a certain degree of drought, partly because they did not fully understand how the satellite readings worked. Beneficiaries also mentioned that they expected to receive the insurance payouts more often than what they did and that, in some instances, they did not understand why people in the neighbouring woreda were receiving payouts and they did not. In other cases, villages faced severe drought conditions that the satellite readings had failed to detect. In this case, a WFP staff member explained that this challenge was resolved by gathering data manually to complement data from the satellite readings.

There is drought in the area, for instance in Kabridehar, but the satellite (reading) indicated green because of the Wayne trees (locally referred to as Gedka Garawaa), which are evergreen but not suitable for consumption by the livestock. This was one of the main challenges that exacerbated misunderstanding within the community. (WFP programme staff)

Having to rely on the satellite reading was very challenging for us. Sometimes, the satellites didn't show drought while there was drought in the area. For instance, in West Imey, there was better rainfall than in Kabridehar. However, the satellite image detected draught in West Imey and not in Kabridehar. Together with local and regional government officials, there should be a team verifying the drought physically, by visiting the intervention areas and deciding to consider the payout, beyond the satellite reading. (Hellocash provider)

70. A further constraint was that insurance payout using mobile banking was not a readily accessible service to some beneficiaries. According to interviews with beneficiaries and key informants, this was due to a lack of nearby financial service providers. Additionally, not having a renewed ID, which is required to open bank accounts or purchase mobile phone SIM cards, made access to banking and mobile services more difficult. A few beneficiaries mentioned that even when they had access to mobile services, they sometimes faced problems accessing payments due to loss of their mobile phones or problems with the mobile network. Some beneficiaries also did not trust the digital financial system, preferring to receive payouts in cash.

71. Lack of accessible roads and transportation limited mobility for project implementation and monitoring activities. This problem was especially severe during the rainy season. The COVID-19 outbreak had also limited their performance, especially to gather community members for project activities.

2.3. Efficiency (EQ 3)

Finding 5: Efficiency of the SIPE programme was not assessed due to missing expenditure and beneficiary data, especially at a disaggregated level (EQ 3.1). Moreover, due to the pioneering nature of the programme, as well as missing data from other programmes, (disaggregated) comparison to other similar interventions was not feasible (EQ 3.2).

72. The best model to assess the SIPE model against other models would imply running a cost-effectiveness model. However, due to the absence of detailed expenditure data very few conclusions could be drawn about the efficiency of the SIPE.

73. While the evaluation matrix suggested a comparison of input (based on budget/expenditure data) against outputs (beneficiaries reached, trainers trained, resources bought, etc). However, this approach was

hindered by the lack of disaggregated expenditure data. For instance, to conduct a better cost efficiency analysis per year, the outputs linked to each of the expenditure items should be available to the evaluation team. Similarly, the expenditure data found in the shared documents were only available at the national level, making regional analysis not possible. Moreover, these data were aggregated, without any clear line items, at the level of fixed and variable costs. Finally, beneficiary data was only available at an aggregated level, without gender disaggregated numbers, to allow a gendered analysis of the input-output ratios. Given the overall spending (5.67 million USD) against the total beneficiary number of 28297, the total cost of the programme per beneficiary is estimated around 200 USD.¹³ However, cost or beneficiary information on other WFP/CO programmes were requested but not shared, to allow an efficiency comparison.

74. The SIIPE programme is pioneering in many ways. For instance, the pooling of insurance companies to deliver the programme, the set-up of mobile finance and other formal financial measures, and the linkages between PSNP and insurance payouts are all innovative approaches to pastoral insurance linked with government schemes. Therefore, a comparison with other types of insurance programmes is not feasible, due to the lack of comparable activities. Moreover, information at a more detailed level (by component or gender) for other comparable programmes is unavailable.¹⁴

2.4. Impact (EQs 4, 5, 6 and 7)

Finding 6: The SIIPE programme led to a significant increase in livestock-related expenditures (forage/fodder, water, veterinary medicine, and other livestock needs), with beneficiary households spending nearly twice as much as non-beneficiary households. Beneficiaries also tended to use payouts for purchasing farming inputs and buying shoats (EQ 4.1).

75. Table 6. suggests that SIIPE led to a statistically significant increase in the household total livestock-related expenditure. SIIPE households reported spending 386 Ethiopian birr (ETB) more on their livestock than non-SIIPE households.¹⁵ When breaking down the expenditure categories, we see that all types of livestock-related expenditure are higher in treated households. For instance, a strong impact is observed for household expenditure on forage/fodder (114 ETB higher), veterinary medicine (107 ETB higher) and other expenditures (46 ETB higher). The only expenditure type where the effect is weakly significant is expenditure on water (around 119 ETB higher). Comparing the female-headed and male-headed households, there were no differences in any of the expenditure categories (Table 29 in Annex XII. Additional results from household survey data).

Table 6. Impact of SIIPE on household livestock expenditures

	Household total livestock-related	Household expenditure on forage/fodder	Household expenditure on water	Household expenditure on veterinary	Household expenditure on other livestock-
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¹³ A clear value is not possible because the final budget shared did not correspond across various documents. This input-output value is based on the expenditure information that could be corroborated through two or more sources, one of which is the ToR.

¹⁴ Examples of other such similar programmes could be found under: <https://www.wfp.org/r4-rural-resilience-initiative> or <https://www.worldbank.org/en/news/press-release/2022/06/23/world-bank-boosts-pastoral-economies-and-climate-action-in-the-horn-of-africa>.

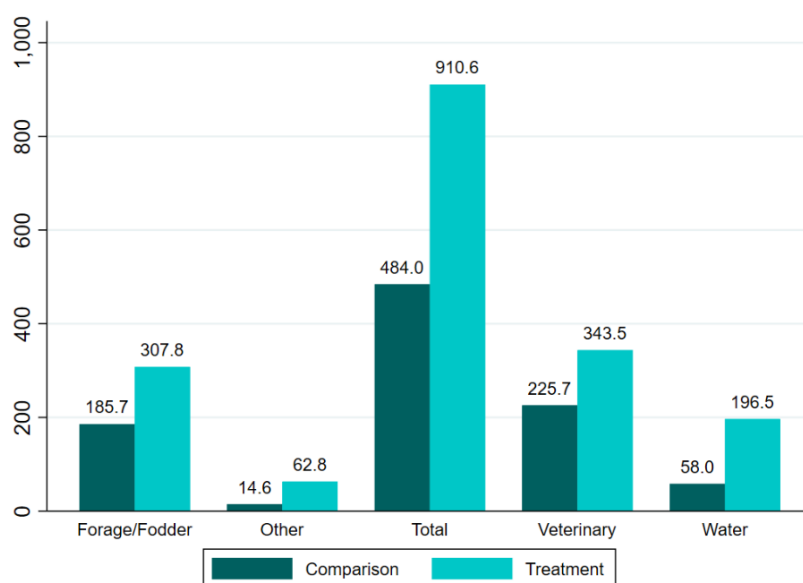
¹⁵ For the presentation of the results, we will use consistently use treated and comparison as terminology to define SIIPE and non-SIIPE households, respectively.

	expenditure			medicine	related activities
Difference (ATET)	386.0***	113.9**	119.1*	107.2**	45.84**
	(2.87)	(2.02)	(1.75)	(2.37)	(2.38)
Comparison group mean	523.1***	193.6***	78.71**	232.3***	18.50
	(8.89)	(8.52)	(2.37)	(8.40)	(1.58)
Obs.	2113	2113	2113	2113	2113

Note: The table shows the average treatment effect on the treated (ATET) estimated using a double-robust matching (IPWRA) approach. Standard errors are shown in parentheses. Significance levels indicated through: * p<0.10, ** p<0.05, *** p<0.01. The values for sales or income are presented in ETB.

76. It is even more important to consider how large these changes in expenditures were in relation to the average expenditures of the comparison group. For instance, as regards total livestock-related expenditures, the difference between the groups is about 386 ETB, but the comparison households spent around 523 ETB, on average. This implies, that the treated group households each spent almost twice as much (910 ETB) as the comparison group households on total livestock related expenditures. Similarly, treated households spent about 160%, 251%, 146% and 348% more than comparison households on forage/fodder, water, veterinary and other livestock-related expenditures, respectively, as estimated from the IPWRA regressions. Figure 2 shows the average expenditure on each category, and in total, in treatment and comparison groups.

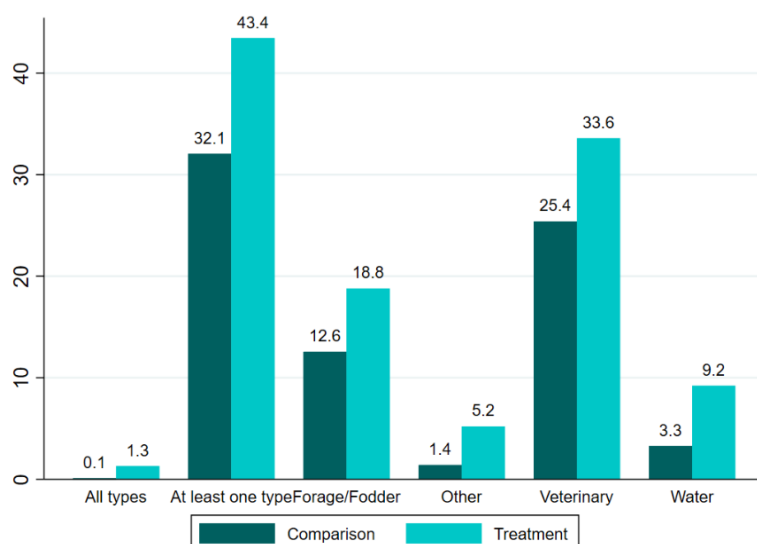
Figure 2. Average livestock related expenditures per household



Source: Own elaboration based on endline household survey

77. Figure 3 depicts the share of households that spent on each category of livestock-related expenses. As can be seen, there is a 11-percentage point (over 33%) difference in the share of households that reported any expenditure (across all categories). Nearly none of the comparison households and very few SIPE households (1.3%) reported expenditures in all categories.

Figure 3. Share of households reporting expenditure (type) related to livestock



Source: Own elaboration based on endline household survey

78. Quantitative data on livestock-related expenditures aligns with qualitative testimonies from beneficiaries who recounted using the insurance payouts to pay for fodder, water, and access to veterinary services for their livestock. They reported using the insurance payouts for other productive assets such as buying farming inputs. A beneficiary bought seeds and fuel for his electric generator in addition to buying fodder for their livestock.

With the second-round payment, I purchased onion seeds, ... the first-round payout, I used to buy fuel for the generator I use to pump water onto my farm. I also used some of the money to buy fodder for my livestock and I used the remaining birr for household expenses. (Male beneficiary, East Imey)

79. The difference in the purchase of livestock is shown in Table 7. On average, both groups purchased about one cow, and between five and six camels in 2023. However, treated households purchased four more shoat units compared to comparison households in our sample.

Table 7. Differences in livestock purchases (2023-2024) between treatment and comparison groups

	Full sample	Treatment	Comparison	Difference
Household purchased cows within 2023-2024	1.1 (10.3)	1.2 (10.9)	0.9 (9.6)	0.3
Household purchased camels within 2023-2024	5.5 (22.7)	5.8 (23.3)	5.2 (22.1)	0.6
Household purchased shoats within 2023-2024	13.4 (34.0)	15.3 (36.1)	11.3 (31.7)	4.0***
Number of observations	2,142	1,075	1,067	

Note: The table presents summary statistics for the 2142 study households interviewed. Columns (1), (2) and (3) present sample means and standard deviations (in parentheses) for households in the full sample, the treatment group and the comparison group, respectively. Column (4) reports the difference in group means with stars indicating the result of the t-test for the comparison of means. Significance stars: * $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$.

Finding 7: The SIPE programme significantly impacted productive asset ownership, while having no impact on durable asset ownership. Improvement in asset ownership was visible in

better lighting sources and higher land ownership compared to non-SIPE households. Beneficiaries also reported improved grazing lands and water access due to involvement in public work activities.

80. When comparing the impact on other assets besides livestock in Table 8, there is a small statistical difference between the total number of assets owned by both groups at endline. On average, both groups owned about eleven assets (with treated households owning about half an asset more). When these are split between productive and durable assets, as measured by an asset index, the impact of the SIPE programme becomes apparent. For productive assets, there appears to be a strong and significant impact.¹⁶ For durable assets, there appears to be no impact. The gender-disaggregated results (Table 31 in Annex XII) suggest that female headed households perform better in terms of overall asset ownership (higher number of assets owner, and higher productive asset index score, on average).

Table 8. Impact of SIPE on asset ownership (productive, durable, all)

	Number of total assets owned by the household in 2024	Productive asset index score in 2024	Durable asset index score in 2024
Difference (ATET)	0.526*	0.214***	0.129
	(1.85)	(3.76)	(1.07)
Comparison group mean	10.56***	-0.141	-0.113
	(27.04)	(-1.57)	(-0.93)
Obs.	2113	2113	2113

Note: The table shows the average treatment effect on the treated (ATET) estimated using a double-robust matching (IPWRA) approach. Standard errors are shown in parentheses. Significance levels indicated through: * p<0.10, ** p<0.05, *** p<0.01. The values for sales or income are presented in ETB.

81. Table 32 in Annex XII. Additional results from household survey data compares the reported weights of jewellery (gold and silver), and the total number of assets owned, which are also similar in both groups. We also descriptively investigate the difference in other conditions related to housing characteristics to understand if treated households perform better there, in Table 33 and Table 34 in Annex XII. Additional results from household survey data. Overall, it appears that, the treatment group faces worse housing conditions (with a lower share of households with improved roofs and a lower number of rooms per household) but performs marginally better in terms of improved sources of lighting (using gas lamps and solar energy more often) with respect to households in the comparison group. Surprisingly, land ownership is higher among SIPE households (by about 0.2 hectares).

82. The qualitative component also looked at beneficiaries' involvement in public work activities and their perceived benefits from these activities. Beneficiaries indicated that, because of the work on rangelands development and water diversion, the grazing land became more productive. In areas experiencing critical water shortage, the construction of water ponds enabled both the community and the livestock to access water.

Our community has benefited a lot from public works. For instance, the water pond is service as

¹⁶ Productive assets (for example livestock, land, farm equipment, seed, and so on) focus on resources that generate income, while durable assets (house, radio, tv, sofa etc) encompass long-lasting goods that support household functioning and quality of life.

a source of drinking water for our animals. Again, when the grass grows, it serves as fodder for our livestock. (Female beneficiary, Kabridehar)

Finding 8: SIIPE households were less likely to adopt multiple coping strategies and sell livestock compared to non-SIIPE households. Insurance payouts helped beneficiaries avoid selling livestock during droughts, allowing them to wait for better prices and positively affecting their coping mechanisms and resilience (EQ 4.3).

83. Table 9 analyses the differences in coping strategies adopted by the households, through the IPWRA estimation. Through a different list of coping strategies, results suggest that beneficiary households implemented a marginally lower number (by 0.23 strategies) compared to the non-SIIPE households, who implemented around 1.8 strategies.¹⁷ Table 35 in Annex XII. Additional results from household survey data breaks down the main coping strategies that were undertaken by the households, where the only statistically significant result in terms of coping strategies relates to livestock sales. On average, fewer SIIPE households (around 21%) sold livestock as a coping strategy when compared to non-SIIPE households (25%). Disaggregating by gender, female headed households appear to resort to the same number of strategies as male headed households (Table 36 in Annex XII). They do tend to rely more on stress-related and crisis coping strategies than male headed households as well.

Table 9. Impact of SIIPE on household coping strategies

	Number of coping strategies adopted by household in last year (out of 23)	Did the HH engage in stress coping (LCS-FS) strategies?	Did HH engage in crisis coping (LCS-FS) strategies?	Did the HH engage in emergency coping (LCS-FS) strategies?
Difference (ATET)	-0.228*** (-3.18)	5.877* (1.75)	4.644 (1.35)	2.732 (0.78)
Comparison group mean	1.795*** (30.23)	82.79*** (32.73)	77.26*** (28.91)	79.93*** (33.29)
Obs.	2113	2113	2113	2113

Note: The table shows the average treatment effect on the treated (ATET) estimated using a double-robust matching (IPWRA) approach. Standard errors are shown in parentheses. Significance levels indicated through: * p<0.10, ** p<0.05, *** p<0.01. The values for sales or income are presented in ETB.

84. During FGDs, some beneficiaries also stated that receiving insurance payouts meant that they were no longer compelled to sell their livestock during droughts, or only did so as a last resort. Instead, they could wait for better prices before they sold their livestock. Consequently, this boosted their income and ability to cope with similar shocks in the future.

Yes, the programme has contributed a lot in coping against challenges, because they came to support us when there is drought and both humans and animals were in need of support. They have saved the community's livestock, and the livestock made it to the "Barwaqo" season (when there is sufficient rain and resources for livestock). The SIIPE project supported the community

¹⁷ The overall number of coping strategies implemented include a large variety of food and essential needs related strategies (such as reduced meals, obtaining credit, relying on assistance or remittances, sales of livestock, assets or crops).

with insurance money to buy fodder for their livestock and this saved them from losing their livestock. This has brought relief to many families. (Male beneficiary, East Imey)

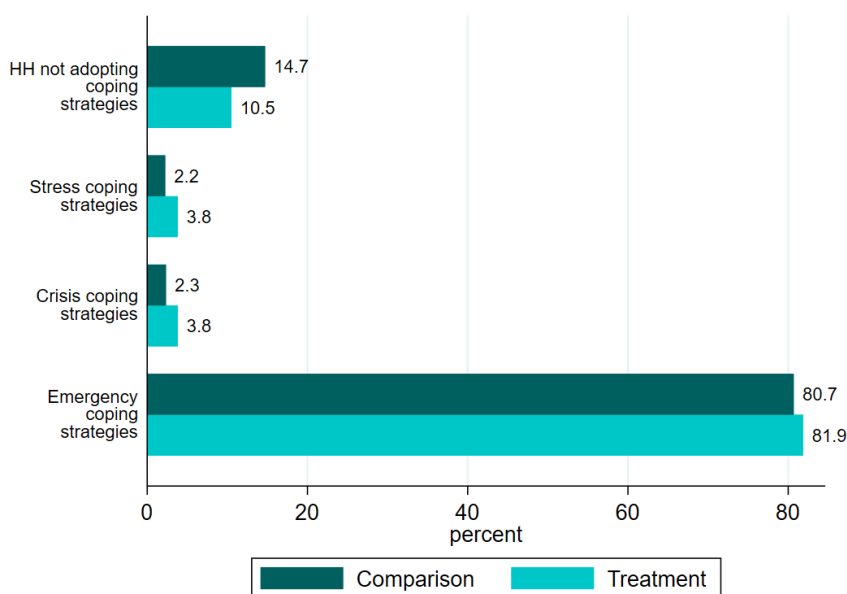
The first one (coping measure commonly used) is selling dry firewood for people living in the city... some also try moving to other areas where there are better resources like water and grazing fields...to areas such as the Afdher zone and others. In addition, (when moving) other family members remain behind with children and look after them so that they do not drop out of school. The last resort then is selling livestock to buy food for the family. (Male beneficiary, Adadle)

85. As seen in Figure 4, however, only 10.5% of SIPE households and 14.7% of the non-SIPE households reported not adopting any coping strategies (based on the Livelihood Coping Strategies – Food Security (LCS-FS) indicator). The largest share of households reported having to adopt strategies to cope with emergency situations (highest stress level). Only around 3% of the households relied on crises coping strategies (or lower) and another low 3% relied only on stress coping strategies.¹⁸

86. Table 9 also compares the distinct types of coping strategies (stress-related, emergency-related, or crisis-related) and differences in adoption between SIPE and non-SIPE households. No (or only weakly statistically significant) difference is observed between the two groups in the adoption of any of the strategies. Around 3% fewer female-headed households tend to adopt either stress or crises coping strategies, compared to male-headed households. This result shows that, on average, the types of strategies used by treatment and comparison household were similar.

¹⁸ The stress coping, crises coping, and emergency coping strategies are related to the LCS-FS indicator and are based on ten different strategies. Four of these are related to stress coping (sale of domestic goods/assets, reduced or ceased payment on essential utilities and bills, spent saving and borrowed cash), three are related to crises coping (sale of productive assets or means of transport, reduced expenses on health, withdrawing children from school) and three are related to emergency coping (mortgaged/sold house or land, begged and/or scavenge and engages in illegal income activities).

Figure 4. LCS-FS disaggregated by types of strategies adopted



Source: Own elaboration based on endline household survey

Finding 9: The SIPE programme did not significantly impact the number of income sources or income levels of beneficiaries compared to non-beneficiaries. The sale of livestock products showed a weak positive effect on income and comprised the largest income share for both groups (EQ 4.4).

87. The SIPE programme had no impact on the overall number of income sources of its beneficiaries, or the level of income between the treatment and comparison groups in 2024, as shown in Table 10. Only income from the sale of livestock products (from a total of 17 sources observed) shows a weak (significant at 90% confidence level) positive effect.¹⁹ Female headed households have a slightly higher number of income sources (1 more income source within 10 households on average) than male headed households (Table 37). It is important to note that these are values measured two years after the end of the programme and may say more about sustainability than about the impact of the programme.

Table 10. Impact of SIPE on income (diversification and sources)

	Number of income sources, 2024	Total Income, 2024	Income received from selling livestock products, 2024
Difference (ATET)	0.0229	432.4	404.7**
	(0.38)	(0.25)	(2.30)
	1.592***	11585.5***	417.6***

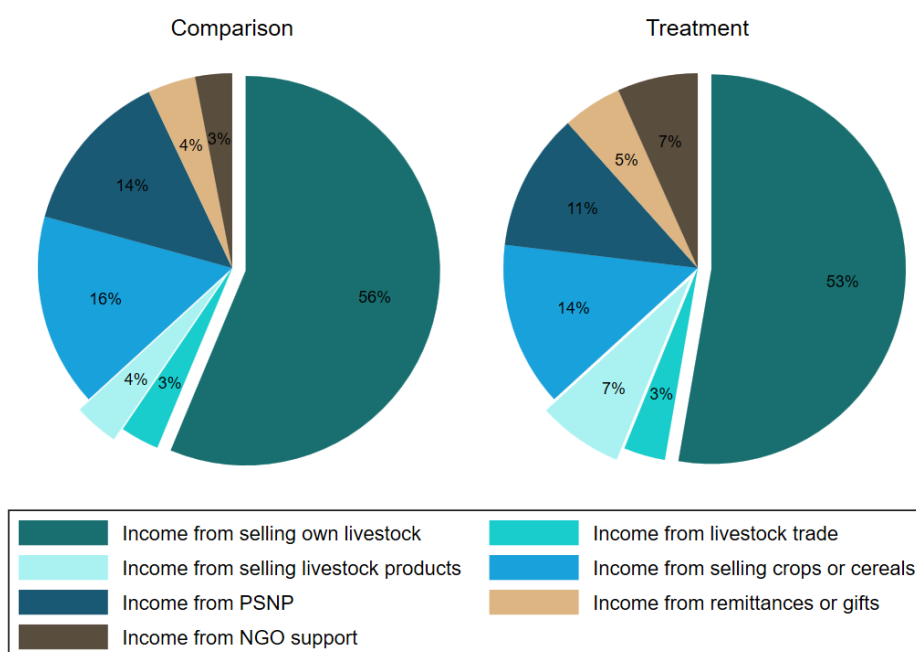
¹⁹ The IPWRA model did not converge for the total value of livestock sales last year, and this result is not robust (does not include the inverse propensity weights from the logistical regression model described in the methodology). The standard errors reported here are also not accurately estimated.

	(28.80)	(7.16)	(3.69)
Obs.	2113	2113	2105

Note: The table shows the average treatment effect on the treated (ATET) estimated using a double-robust matching (IPWRA) approach. Standard errors are shown in parentheses. Significance levels indicated through: * p<0.10, ** p<0.05, *** p<0.01. The values for sales or income are presented in ETB.

88. Figure 5 depicts the reported share of household income derived from the main sources. As can be seen, the sale of livestock comprises the largest share in both treatment and comparison groups (50% of SIPE household income compared to 52% in comparison households). This may explain why comparison households have a 3% lower share of income from sale of livestock products (because they sell more livestock). The second and third largest sources are the sale of crops or cereals and income from PSNP, respectively. These two sources account for a smaller share of total income in treated households (25%), than in comparison households (30%). However, the share of income from NGO support is higher (7%) in treated households, as opposed to comparison households (3% only). The reported income (in ETB) received from each of these sources is shown in Table 38 in Annex XII. Additional results from household survey data.

Figure 5. Reported shared of total income from various sources



Source: Own elaboration based on endline household survey

Finding 10: The SIPE programme did not significantly affect the stability or level of beneficiaries' incomes. Qualitative interviews suggest that while the programme helped stabilise income and protect family well-being, its impact was limited by delayed and insufficient insurance payouts, compounded by inflation and fluctuating prices (EQ 4.5).

89. Another potential outcome of SIPE could have been the provision of more stable income levels and sources for its beneficiaries if not higher incomes. However, both appear to have been unaffected, as shown in Table 11. On average, both groups earn about 190% of their incomes from stable sources and on average,

reported less than one month (0.8 months) without income in the last year.²⁰ Differences were also not visible when disaggregating the sample by the gender of the household head (Table 40).

Table 11. Impact of SIPE on income stability

	Proportion of income from stable sources, 2024	Number of months without income last year
Difference (ATET)	0.0247 (1.21)	-0.0909 (-1.06)
Comparison group mean	0.188*** (12.08)	0.779*** (11.32)
Obs.	1946	2113

Note: The table shows the average treatment effect on the treated (ATET) estimated using a double-robust matching (IPWRA) approach. Standard errors are shown in parentheses. Significance levels indicated through: * p<0.10, ** p<0.05, *** p<0.01. The values for sales or income are presented in ETB.

90. Table 12 breaks down the differences in total income values (in ETB). As can be seen, on average, households earned around 12500 ETB in the last year, with around 3100 ETB from stable sources, with no differences between the two groups.

Table 12. Differences in income level (total and stable sources)

	Full sample	Treatment	Comparison	Difference
Total Income, 2023-2024	12,536.3 (16,283.7)	12,249.4 (15,726.6)	12,825.4 (16,828.9)	-575.9
Total Income from stable sources, 2023-2024	3,069.4 (8,350.7)	3,061.6 (7,633.9)	3,077.3 (9,019.1)	-15.7
Number of observations	2,142	1,075	1,067	

Note: The table presents summary statistics for the 2142 study households interviewed. Columns (1), (2) and (3) present sample means and standard deviations (in parentheses) for households in the full sample, the treatment group and the comparison group, respectively. Column (4) reports the difference in group means with stars indicating the result of the t-test for the comparison of means. Significance stars: * p ≤ 0.1, ** p ≤ 0.05, *** p ≤ 0.01.

91. However, qualitative interviews with programme beneficiaries, indicate that the programme contributed to the income stability of their household and helped to protect the well-being of their family members. Nonetheless, the limited effect of the programme on income stability can also be explained by factors mentioned by programme beneficiaries. In some cases, insurance payouts did not arrive on time, and this made it hard for beneficiaries to use the payouts for their intended purposes. Some beneficiaries also stated that the insurance payouts were insufficient to cover the necessary expenses for their livestock, especially considering the problem of inflation and fluctuation of the price of goods.

Finding 11: The SIPE programme had no significant impact on reducing child labour, child marriage, or school absenteeism. School absenteeism was lower in female-headed households compared to male-headed households (EQ 4.6).

92. Table 13 suggests that there were no differences between treatment and comparison households in the rates of child labour, child marriage or school absenteeism even differentiated by gender, as shown in Table

²⁰ Alternatively, one can say that across ten households, a total of 8 months in 5 years were spent without income.

41 in the Annex XII. Overall, it appears that in both groups, around 47% households reported at least one child being absent from school, 11% had at least one child (< 18 years) engaged in economic activities, and around 2.5% had at least one married member under 18 years of age. In terms of school absenteeism, female headed households reported a 9-percentage point lower rate (45% versus 54% in male headed households).

Table 13. Impact of SIPE on school absenteeism, child labour and early marriage

	% of households with children absent from school	% of households with children engaged in economic activities	% of household with married children (<18 years)
Difference (ATET)	3.775	-0.669	-0.368
	(1.29)	(-0.36)	(-0.52)
Comparison group mean	47.46***	11.28***	2.464***
	(20.66)	(7.65)	(5.18)
Obs.	1890	1890	2113

Note: The table shows the average treatment effect on the treated (ATET) estimated using a double-robust matching (IPWRA) approach. Standard errors are shown in parentheses. Significance levels indicated through: * p<0.10, ** p<0.05, *** p<0.01. The values for sales or income are presented in ETB.

Finding 12: SIPE beneficiaries demonstrated significantly higher levels of overall insurance awareness and a better understanding of specific aspects of SIPE compared to the comparison group. However, significant gaps in understanding were noted, with some mistaking SIPE for humanitarian aid or PSNP, leading to unrealistic expectations and confusion about payouts (EQ 5.1).

93. In Table 14, we capture the level of overall knowledge related to insurance within the sample.²¹ It is encouraging to note that SIPE beneficiaries report higher levels of insurance awareness in general (reported by 45 percentage points more households) as well as a better understanding of more specific aspects of SIPE (as measured by the insurance knowledge index, about 1 response higher) as compared to peer households in the comparison group.²²

Table 14. Impact of SIPE on insurance knowledge (general and SIPE-specific)

	% of households that have heard of insurance (general)	Knowledge of insurance: number of correct responses to 7 test questions
Difference (ATET)	44.80***	1.149***
	(16.93)	(8.21)
Comparison group mean	33.30***	1.933***
	(13.70)	(20.05)
Obs.	2113	2113

Note: The table shows the average treatment effect on the treated (ATET) estimated using a double-robust matching (IPWRA) approach. Standard errors are shown in parentheses. Significance levels indicated through: * p<0.10, ** p<0.05,

²² The questions that were asked related to SIPE insurance were asking respondents to confirm statements about whether “Insurance is free”, “Insurance is a form of loan”, “Insurance only covers specific types of risks/losses”, “The insurance premium (amount paid to insure) for livestock depends on the number of animals insured”, etc.

*** $p < 0.01$. The values for sales or income are presented in ETB.

94. During the qualitative interviews and discussions, some of the SIPE beneficiaries exhibited a general understanding of the programme, its main approach, objectives, and overall process.

The intention of this programme is to work against the weakening or death of our livestock. By saving our livestock from the effects of drought, it has enabled us to cover our needs using the livestock as resources (selling when needed) ... If our livestock are affected/lost, the livelihood of the community as a whole would be affected. I understood that the SIPE programme had brought a lot of benefits for our community. (Male beneficiary, East Imey)

Livestock insurance (payout) is given during the time of drought based on the information from satellites. (Community leader, Adadle)

95. However, key informant interviewees as well as FGD participants discussed that there were significant gaps in the beneficiaries' understanding of the programme. Some beneficiaries were unclear about the programme objectives. Some considered the SIPE programme to be humanitarian aid, while others confused SIPE with PSNP. Those who considered the SIPE programme as humanitarian aid expected to receive the payouts regardless of the climate. The following statements from government officials and beneficiaries illustrate the misunderstanding of the SIPE programme.

Since they don't understand the programme clearly, they complain and ask why they are not receiving another round of payout. They assume that the money will be continuously provided in a similar way as the PSNP (Government official, Adadle)

For example, they were helping or making payments at the time of the drought but there was discrimination between the Woredas. They are helping, for instance... they were giving payouts more frequently to people in East Emi Woreda compared to ours. (Female beneficiary, Adadle)

Beneficiaries were given a card, and a certain amount of money was written on it. They didn't provide us with any clarification about the amount of money on the card and how they provided it. Thus, we were not clear about it. (Community leader, Adadle)

Finding 13: SIPE households were significantly more likely to purchase livestock insurance, with 27% more insured compared to non-beneficiaries. They also showed a higher willingness to pay for livestock insurance, particularly for shoats. Most preferred to finance insurance through livestock sales or other economic activities. (EQ 5.2).

96. The results also show that SIPE households purchased more livestock insurance by (27 percentage points) compared to the non-beneficiaries (where 8.1% households reported having insurance).²³ Comparing the willingness to pay for livestock insurance, a greater share of treated households expressed that they would be willing to pay for livestock insurance (27 percentage points higher than the comparison group average of 13%). This willingness to pay is largely driven by a higher willingness to pay for insuring shoats, as opposed to cows or camels (Table 45 in Annex), a result which is also aligned with the higher purchases of shooat units (as shown in Table 7).²⁴

²³ This result should not be surprising in either way: a low response is expected in the comparison group, which did not receive SIPE programme, but also 9% of the sample claiming to have insurance might be misreporting, or response bias. Nonetheless, we cannot rule out some small degree of contamination within comparison households.

²⁴ The preferred financing option for a large percentage of households willing to purchase insurance for their livestock is income from livestock sales (more than 80%), followed by income from other economic activities such as wages and casual labour.

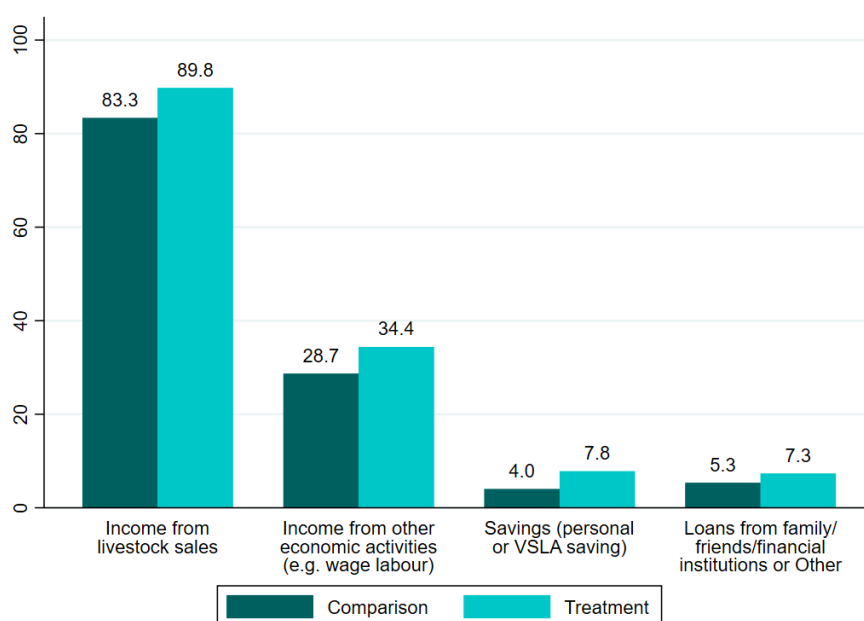
Table 15. Impact of SIPE on insurance behaviour

	% of households that have purchased insurance	Willingness to pay to insure livestock
Difference (ATET)	27.54***	27.19***
	(8.05)	(9.25)
Comparison group mean	8.075***	13.47***
	(4.17)	(7.47)
Obs.	1191	2113

Note: The table shows the average treatment effect on the treated (ATET) estimated using a double-robust matching (IPWRA) approach. Standard errors are shown in parentheses. Significance levels indicated through: * p<0.10, ** p<0.05, *** p<0.01. The values for sales or income are presented in ETB.

97. We also check for the preferred sources of financing their livestock (Table 46, Table 47 and Table 48 for cows, camels and shoats, respectively). Overall, majority of the households preferred financing livestock insurance through sales of livestock (> 85%), or from other economics activities such as labour (~33% of the sample). Figure 6 depicts the preferred financial options indicated by households in the sample.

Figure 6. Preferred source of financing insurance for cows



Source: Own elaboration based on endline household survey

Finding 14: The primary barriers to purchasing insurance were lack of resources and a low understanding of insurance. Beneficiaries expressed a willingness to pay if the insurance was partially subsidised and preferred paying premiums during the rainy season. They emphasised the need for affordable premiums within their financial means (EQ 5.2).

98. When asked for reasons for unwillingness to insure livestock (to sample in both groups that said they had not purchased livestock insurance), the main reason cited was the lack of resources to pay for insurance (mainly in treated group) while a low understanding of insurance was cited as another reason (mainly within control group). Other reported reasons can be found in Table 49 in Annex XII.

99. Similarly, during the qualitative interviews, beneficiaries across the different woredas expressed their

willingness to pay for livestock insurance services but explained that they would like the insurance to be partially subsidised. This preference was expressed by both male and female beneficiaries.

We know that if we save some money, it will benefit us during hard times. If they requested us to purchase half of the premium and subsidise the remaining half, we are willing to participate and purchase the premium for our livestock. For instance, if I buy a premium for one of my livestock, with 200 Birr, and they give me back about 400 Birr with a subsidy during drought season, it will be very good and I will participate. It is very important for us, and I will purchase premium for my livestock as much as I can afford (Female beneficiary, Kabridehar).

I will volunteer and be willing to pay whatever amount they ask me. I am even ready if they ask us to pay today. (Female beneficiary, Adadle)

100. Beneficiaries have identified two key conditions that would make paying insurance premiums more feasible for them. One condition relates to the timing of payments. They explained that they prefer to pay premiums during the rainy season. Their rationale is that during this time, they can sell some of their livestock at a good price. By selling their livestock during this season, they can generate the income needed to cover the insurance premium without straining their finances. The second condition has to do with the affordability of the insurance premium. They stated that the premium should consider their overall economic capacity. This indicates that they want the insurance premium to be affordable and within their financial means. They reported different amounts of premium that they could afford, ranging from 200 ETB to 10000 ETB. However, other beneficiaries mentioned that they expected and hoped that insurance payouts would continue without any financial contribution towards the premium from their side.

I will buy this insurance as much as my capacity allows me to do so. I will buy this insurance during the good season. I will sell some of my animals to buy insurance for the remaining and I will pay... as long as I will benefit from the payout later on. (Male beneficiary, East Imey)

101. Insights from some key informants revealed that modifying the insurance premium coverage is seen as critical for enhancing sustainability. These key informants suggested that requiring beneficiaries to contribute an (affordable) percentage of the insurance premium²⁵ would foster sustainability by instilling a sense of ownership. On the beneficiaries' side, their testimonies suggested a willingness to pay some percentage of the insurance premium, supporting the applicability of the key informants' suggestion.

Finding 15: The SIIPE programme showed a weak increase in mobile banking usage among treated households. As a result, many still received payouts in cash due to limited access and knowledge of mobile banking services. In contrast,, the programme significantly increased participation in VSLAs and ROSCAs, thereby promoting financial diversification and savings (EQ 5.3).

102. Table 16 shows that the share of households reporting access to a mobile banking account was not different in either group. However, there is a (statistically) weak impact on the use of mobile banking accounts in treated households (around 5.1 percentage points higher). Gender disaggregated results suggest that female-headed household were even less likely than male-headed ones to use mobile banking or have any access to it.²⁶

²⁵ As opposed to having beneficiaries engage in public work activities as a contribution to insurance premium.

²⁶ Gender gaps in access to mobile phones is a common and well reported occurrence in LMICs. Statista

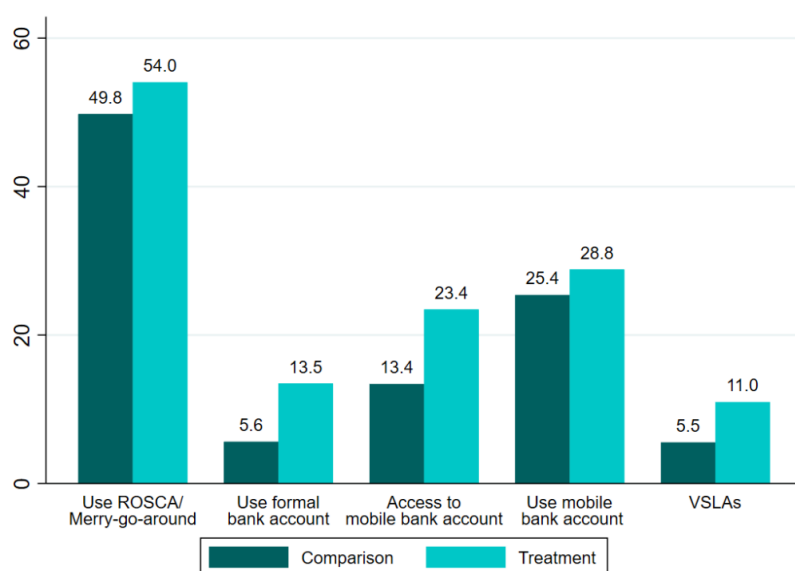
Table 16. Impact of SIPE on access and use of financial services encouraged by SIPE

	% of households with access to a mobile banking account	% of households that use a mobile banking account	% households that participate in VSLAs	% households that participate in ROSCA/Merry-go-round
Difference (ATET)	5.758	5.087*	6.111***	8.495***
	(1.31)	(1.66)	(3.13)	(4.41)
Comparison group mean	48.53***	24.25***	5.032***	5.315***
	(14.79)	(9.74)	(4.33)	(5.41)
Obs.	2113	2113	2113	2113

103. Note: The table shows the average treatment effect on the treated (ATET) estimated using a double-robust matching (IPWRA) approach. Standard errors are shown in parentheses. Significance levels indicated through: * p<0.10, ** p<0.05, *** p<0.01. The values for sales or income are presented in ETB.

104. Figure 7 depicts the share of households that reported using the various financial services and tools mentioned above. Throughout, a larger share of treatment households reported using each of the financial services and tools.

Figure 7. Share of households reporting use of various financial tools and services



Source: Own elaboration based on endline household survey

105. Qualitative data also showed that the experiences of beneficiaries with mobile banking were varied.

(<https://www.statista.com/statistics/1308507/gender-gap-in-mobile-phone-access-in-africa-by-country/>) puts it at 36% gap for Ethiopia in 2021, or the blog from WB which suggests a 11percentage point gap (<https://blogs.worldbank.org/en/african/mobile-phone-technology-could-expand-equitable-access-financial-services-ethiopia>) in 2021.

Some had used the service and received SIIPE insurance payout through it. However, most of them were still receiving payouts in cash because they didn't use the mobile banking service.

106. SIIPE beneficiaries not using mobile banking due to limited nearby services, lack of knowledge about how to use mobile banking, or the absence of mobile phones and SIM cards. Those who were familiar with mobile banking received payouts through Hello Cash; otherwise they received their payouts in cash. Belcash acted as a stakeholder, distributed money via mobile banking where possible, or alternatively delivered cash where network coverage was lacking.²⁷

107. The results in Table 16 also show that the SIIPE programme led to increased participation in VSLAs (6 percentage points) and ROSCAs (8.5 percentage points) among treated households, implying a diversification of financial services and tools (and savings sources) within SIIPE households. These results are again particularly positive when disaggregating by the gender of the household head, where female-headed households tend to use ROSCAs/merry-go-rounds more often.

108. During FGDs and IDIs, some programme beneficiaries expressed that they have found multiple benefits from their participation in the programme. Through their VSLA membership, they have been encouraged to save regularly and this has provided opportunities for them to borrow money for income-generating activities or emergencies. The training provided as part of the programme has enhanced their understanding of money and savings, helping them learn how to make more informed financial decisions, manage their resources better and plan.

Even though our current income is still very low due to different reasons, we have now learned how to make money and work hard. For example, a woman can go to the shop and buy ingredients and cook to sell that food. This way she can earn a profit instead of just sitting with her child and waiting for the government to help her. Previously, we didn't know how to save money and now after the SIIPE project trained us and helped us create the (VSLA), ...we collect and give the money to a member who needs it and then we will wait for him and he will work using that money and return it to the group. (Female beneficiary, Adadle)

109. Similarly, beneficiaries mentioned that the VSLA membership facilitated access to loans, and this helped them to start small businesses.

My wife started a small retail shop around our home, this was made possible by the support from the programme (VSLA membership). As a result, the life of my children and spouse has improved. Previously, we were empty-handed, but now we own a small retailing shop. (Male beneficiary, East Imey)

Finding 16: SIIPE households are more likely to have a formal bank account, and use more financial services and tools, compared to the comparison group (EQ 5.4).

110. Table 17 shows that, overall, the share of households that report having a formal bank account is about 10.4 percentage points higher in the treatment group than in the comparison group (about 13% in the comparison group). SIIPE households also perform better in terms of diversification of financial services and tools, with nearly 0.36 additional financial services and tools being used (as opposed to an average of 1 in the comparison group).

Table 17. Impact of SIIPE on formal financial products and overall financial services

	% of households with a formal	Total number of financial
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²⁷ Somali Microfinance (the current Shebele Bank) and HelloCash (provided by Belcash) facilitated insurance payouts under the programme.

	bank account	services and tools used by household
Difference (ATET)	10.43***	0.359***
	(3.84)	(3.87)
Comparison group mean	13.19***	0.963***
	(7.67)	(14.02)
Obs.	2113	2113

Note: The table shows the average treatment effect on the treated (ATET) estimated using a double-robust matching (IPWRA) approach. Standard errors are shown in parentheses. Significance levels indicated through: * p<0.10, ** p<0.05, *** p<0.01. The values for sales or income are presented in ETB.

Finding 17: More SIIPE households planned to use their insurance payouts for livestock activities compared to the comparison group (53% vs. 37%). However, there were no significant differences between the share of use within both groups in planned use of payouts for other expenses (EQ 6.1).

111. Households were asked about use of insurance payouts in two ways in the endline survey. First, they were asked how they would potentially allocate SIIPE payouts, if they were still happening today, specifically which activities they will use the payouts for. In the second question, respondents used 10 beans to represent the proportion of the total payout they would allocate (if they were still receiving them) to various types of expenditures.

112. Table 18 shows that 16 percentage points more treated households responded that they would use the payouts for livestock activities with a total of 53% treated households, as opposed to 37% comparison households. When asked about they planned to use payouts for any other group of expenditures, no statistically significant difference is observed between the treatment and comparison group shares. This implies that besides livestock, the share of households reporting planned use of payouts for other activities was similar. It is important to note that these are experiences related to any payout that the households would get but are likely heavily influenced by their experience from the SIIPE programme (which ended in 2022).

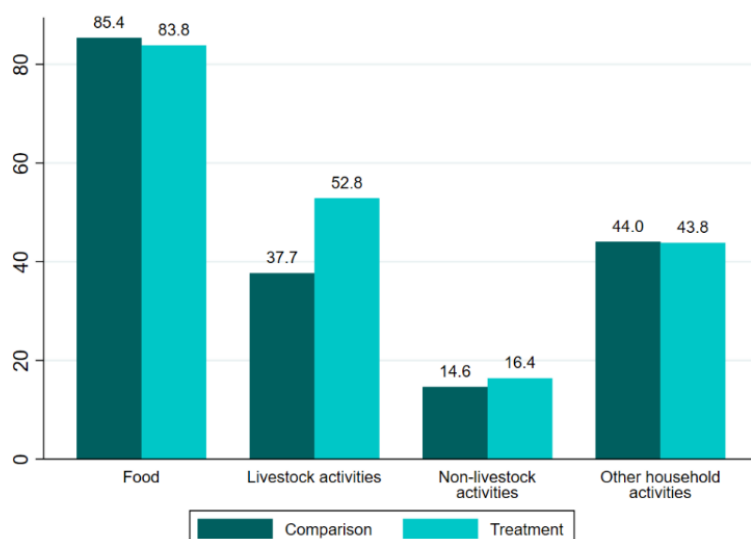
Table 18. Impact on planned share of insurance payouts to be used for livestock activities

	% of households that would use the payout for livestock activities
Difference (ATET)	15.75***
	(3.25)
Comparison group mean	37.39***
	(10.01)
Obs.	2113

Note: The table shows the average treatment effect on the treated (ATET) estimated using a double-robust matching (IPWRA) approach. Standard errors are shown in parentheses. Significance levels indicated through: * p<0.10, ** p<0.05, *** p<0.01. The values for sales or income are presented in ETB.

113. Figure 8 shows the planned used of payout spending. Overall, a very high share in both groups mentioned that they would potentially use the payouts for food (Treatment: 85%, Comparison: 84%), followed by livestock activities (Treatment: 53%, Comparison: 38%) and then other household needs (Treatment: 44%, Comparison: 44%). Therefore, the largest share of households would have used payouts for food expenditures, closely followed by livestock expenditures (45%) and other household expenditures (44%). This suggests that the main use of the payouts was likely for household consumption smoothing, as opposed to livestock management.

Figure 8. Share of households reporting which activities they planned to use the payouts for



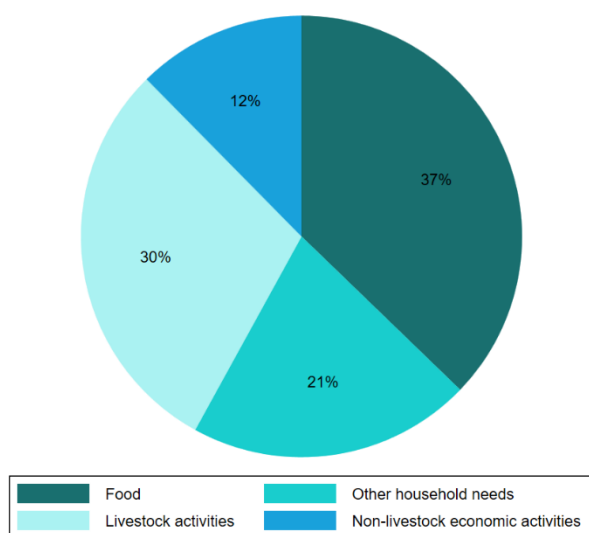
Source: Own elaboration based on endline household survey

Finding 18: SIPE beneficiaries used 37% of their insurance payouts for food, while livestock activities received about 30% of the payouts, suggesting that beneficiaries frequently used payouts for essential and personal expenses, due to urgent needs during severe drought (EQ 6.2).

114. When comparing the actual purchases by SIPE beneficiaries (based on response in share of beans used per activity), food indeed comprises 37% of the total share of purchases. Livestock activities are in second place for SIPE beneficiaries, at around 30% of the insurance payout.²⁸ Around 21% of the payouts were used for other households needs and only 12% was reportedly used for non-livestock activities.

²⁸ It is important to note that while we asked about actual and planned use of payouts, in the last year, the programme has already ended and therefore there were no payouts.

Figure 9. Household reported use of payout spending (in percentages)



Source: Own elaboration based on endline household survey

115. Qualitative evidence also suggests that beneficiaries used the insurance payouts for purposes other than those intended by the programme. Payouts were sometimes used for food and other household expenses. Although beneficiaries were aware of the intended purpose of the payouts, they sometimes allocated funds to food because they had to prioritise the wellbeing of their household members. In addition, some beneficiaries reportedly used the payout for other personal expenses, including the purchase of khat.

Unfortunately, (we received the money) at a very difficult time...at a time when we were experiencing severe drought. At the time everyone used it (the payout) to cover their basic needs... they bought some basic things with that money. So that was how we used the money we received during the two payout rounds. (Male beneficiary, Adadle)

Finding 19: SIPE households experienced significant livestock losses between 2019 and 2024, erasing earlier advantages over comparison households. The largest losses were due to drought, followed by disease and accidents (EQ 6.3).

116. This evaluation question examines the role of the SIPE programme in strengthening the ability of pastoralists to keep their livestock alive. We see that the number and value of livestock offtakes or sales (in Table 19, columns 2 and 3, and columns 4 and 5, respectively), is not different between the two groups.

Table 19. Impact of SIPE on pastoralists' ability to keep animals alive

	% of households that would use the payout for livestock activities	Total number of offtakes excl. sale	Total number of livestock sold in last year	Total value of offtakes in last year
Difference (ATET)	15.75***	0.530	809.7	12.28

	(3.25)	(0.93)	(0.68)	(1.39)
Comparison group mean	37.39***	0.366***	1407.1***	2.634***
	(10.01)	(6.11)	(4.56)	(15.60)
Obs.	2113	2113	2113	2113

Note: The table shows the average treatment effect on the treated (ATET) estimated using a double-robust matching (IPWRA) approach. Standard errors are shown in parentheses. Significance levels indicated through: * p<0.10, ** p<0.05, *** p<0.01. The values for sales or income are presented in ETB.

117. The planned usage of payouts (on food and other non-livestock related activities needs) may be driven by the large erosion of livestock among SIIPE households, as shown in Table 20. Although at baseline (2019) the reported number of cows, camels and shoats was considerably higher in the treatment group, at endline (2024) this difference has either completely disappeared or is only marginally higher (weakly statistically significant). Therefore, the treatment group lost a lot of livestock (especially shoats) between 2019 and 2024. It is important to note that even between 2023 and 2024 (when the programme had ended and there were no more payouts), there is a noticeable decline in the average number of livestock units owned by the household.

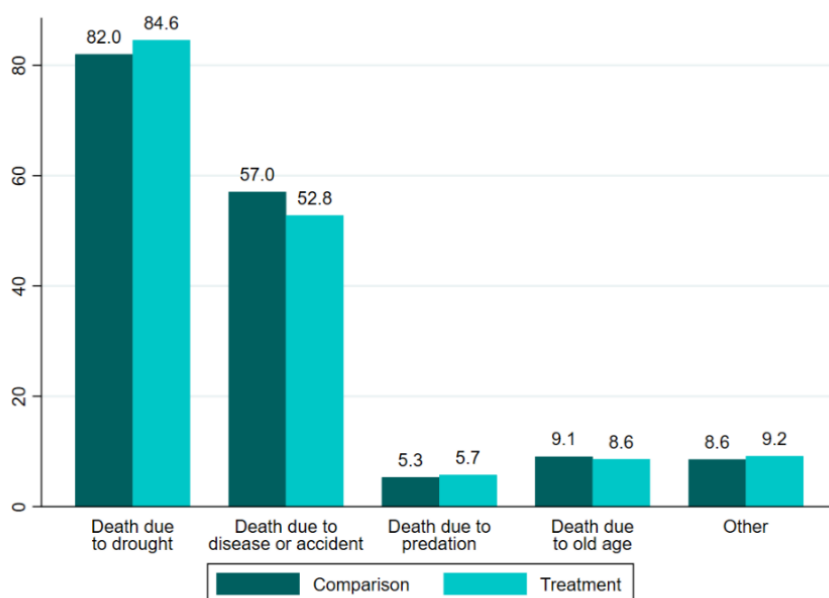
Table 20. Livestock numbers between baseline and endline (2019, 2023 and 2024)

	Full sample	Treatment	Comparison	Difference
Number of cows owned in 2019	5.4 (5.0)	5.9 (6.5)	4.9 (2.9)	1.0***
Number of cows owned in 2023	3.8 (4.5)	4.0 (5.3)	3.6 (3.5)	0.4*
Number of cows owned in 2024	3.2 (3.4)	3.3 (3.6)	3.0 (3.2)	0.3*
Number of camels owned in 2019	1.5 (5.1)	1.9 (6.9)	1.1 (1.9)	0.8***
Number of camels owned in 2023	1.1 (2.4)	1.2 (2.7)	1.0 (2.2)	0.2**
Number of camels owned in 2024	0.9 (2.2)	1.0 (2.4)	0.9 (2.1)	0.2
Number of shoats owned in 2019	26.4 (68.3)	31.1 (94.8)	21.5 (16.5)	9.6***
Number of shoats owned in 2023	18.5 (14.6)	20.4 (15.7)	16.7 (13.0)	3.7***
Number of shoats owned in 2024	21.2 (174.3)	20.1 (33.6)	22.3 (244.7)	-2.2
Number of observations	2,142	1,075	1,067	

Note: The table presents summary statistics for the 2142 study households interviewed. Columns (1), (2) and (3) present sample means and standard deviations (in parentheses) for households in the full sample, the treatment group and the comparison group, respectively. Column (4) reports the difference in group means with stars indicating the result of the t-test for the comparison of means.

118. As can be seen in Figure 10, the largest reported reason for livestock losses (specifically cow in the figure, but a similar trend is observed for camels and shots in Figure 18 and Figure 19 in Annex XII) is the drought (over 80% of the sample), followed by disease and accidents- over 50% of the sample- (which again may be linked to the higher expenditure on livestock veterinary services reported before).

Figure 10. Share of households reporting reasons for loss of Cows

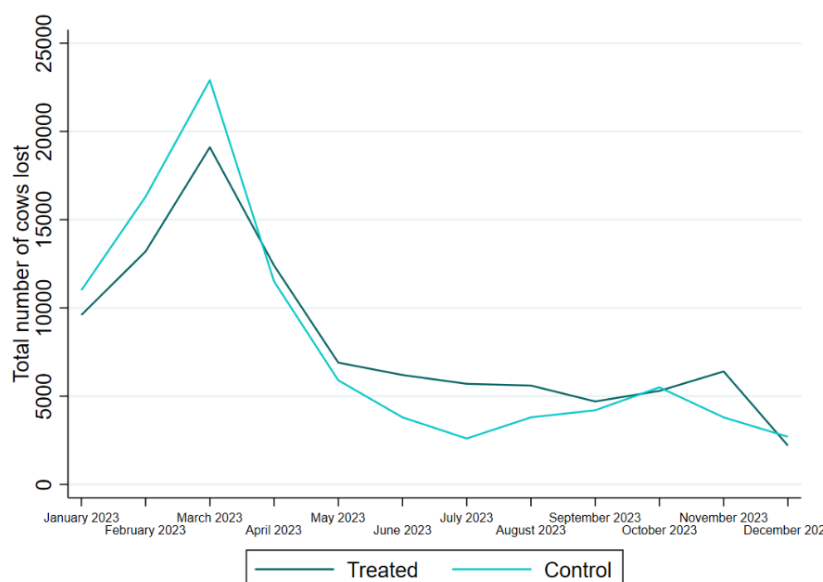


Source: Own elaboration based on endline household survey

Finding 20: Despite similar overall loss trends between the two groups, SIPE households had less severe losses after the rainy season began, suggesting better livestock management and coping. Comparison households faced higher losses before the rainy season, indicating reliance on livestock sales as a coping mechanism during drought (EQ 6.3).

119. When comparing the trends in loss for the treatment and comparison group over the year preceding the endline survey (Figure 11), the largest losses occurred before the start of the rainy season, and reduced after March, when the rainy seasons starts/ is about to start. While the trends are similar in both groups, there is something that can be observed before and around the start of the rainy season. Total losses are much higher for the comparison group before April and are higher for the treated group after April. This implies that the comparison group relied on livestock sales for consumption smoothing than the treatment group, similar to the finding in Table 35, where livestock sales were reportedly lower in the treatment group, compared to the comparison. Therefore, overall, households in the treatment group can smoothen their livestock sales better, whereas for the comparison group, these are largely done as a coping strategy, during the worst drought periods (with the dry season at the end of the year being another such period). Given that these are numbers from 2023, it appears that the positive effects of SIPE persist even after the end of the programme. The trends in livestock losses or camels and shoats are reported in Figure 20 and Figure 21 in Annex XII and are similar.

Figure 11. Timing of loss for Cows in last year (total for both samples)



Source: Own elaboration based on endline household survey

Finding 21: There is no significant difference in livestock sales between the treatment and comparison groups for cows, camels, and shoats. However, the average selling prices in the treatment group were notably lower (EQ 6.4).

120. As regards the level of livestock sales in the past year, there appears to be no difference between the treatment and comparison group when comparing cows, camels and shoats (first three rows of the table).²⁹ For every ten households in both groups, on average, four cows, one camel and around 82 goats were sold in the last year. For shoats, the numbers are found to be much higher in the treated group (around 14 shoats per household), but this is not statistically significantly different. When comparing the average selling prices of livestock, these were found to be much lower in the treatment group (except for cows). This may suggest market saturation, after the end of the programme, where households started selling livestock they could not afford to keep any longer.

Table 21. Livestock sales and prices in last year

	Full sample	Treatment	Comparison	Difference
Number of cows sold last year	0.4 (0.9)	0.4 (0.8)	0.4 (1.0)	-0.1
Number of camel(s) sold last year	0.1 (0.5)	0.1 (0.5)	0.1 (0.5)	-0.0
Number of shoat(s) sold last year	8.2 (203.8)	14.2 (287.5)	2.0 (2.7)	12.2

²⁹ The IPWRA regression results also suggest no significant difference between SIPE and non-SIPE households.

Average selling price (ETB) per cow	15,703.5 (12,263.6)	15,982.9 (13,672.6)	15,447.4 (10,829.5)	535.5
Average selling price (ETB) per camel	29,806.3 (17,575.2)	25,530.0 (18,129.5)	33,851.4 (16,133.6)	-8,321.3***
Average selling price (ETB) per shoat	5,335.3 (5,519.2)	4,844.8 (3,957.0)	5,830.8 (6,706.5)	-986.0***
Number of observations	2,142	1,075	1,067	

Note: The table presents summary statistics for the 2142 study households interviewed. Columns (1), (2) and (3) present sample means and standard deviations (in parentheses) for households in the full sample, the treatment group and the comparison group, respectively. Column (4) reports the difference in group means with stars indicating the result of the t-test for the comparison of means. Significance stars: * $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$.

Finding 22: SIPE households show better food security compared to the comparison group through lower HFIAS scores. Additionally, SIPE households employ fewer food-related coping strategies in response to shocks, reflecting better food security management compared to the comparison group (EQ 7.1).

121. Table 22 suggests that SIPE households experienced a lower level of food insecurity in terms of their food access intake (HFIAS score), compared to households in the comparison group.³⁰ For the HFIAS (that can range between 0-27), a lower score indicates less food insecurity, and SIPE households scored, on average, about 1.7 points lower than comparison group households (around 8.7 points). The SIPE households also scored better on the categorical HFIAS variable (average score of 2.7) than comparison households (with an average of 3.2).³¹

Table 22. Impact of SIPE on food security

	Household Food Insecurity Access Score	Household Food Insecurity Access category	Food Consumption Score	Reduced Consumption Strategies Index Score
Difference (ATET)	-1.746***	-0.273***	-0.0112	-3.575***
	(-4.60)	(-4.46)	(-1.37)	(-5.17)
Comparison group mean	8.698***	3.234***	0.995***	14.26***
	(27.12)	(63.53)	(267.41)	(22.97)
Obs.	2113	2112	2113	2113

Note: The table shows the average treatment effect on the treated (ATET) estimated using a double-robust matching (IPWRA) approach. Standard errors are shown in parentheses. Significance levels indicated through: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. The values for sales or income are presented in ETB.

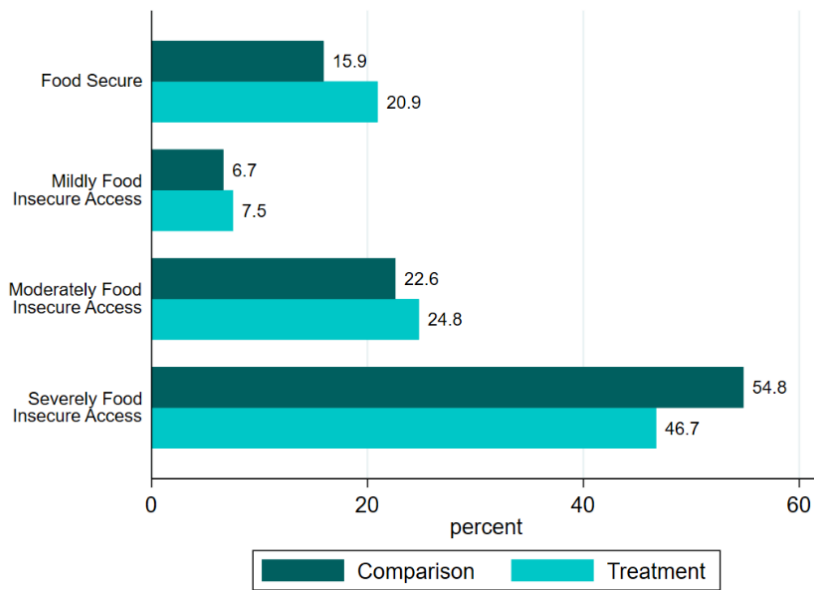
122. Figure 12 reports the proportions of households that are food secure, and mildly, moderately, and severely food insecure according to the HFIAS categorical variable. It is noted that five percentage points

³⁰ The HFIAS score is a continuous measure of the degree of food insecurity (access) in the household in the past four weeks (30 days). A HFIAS score variable is calculated for each household by summing the codes for each frequency-of-occurrence question (how often did an incident occur?). The lower the score (0-27), the less food insecurity (access) a household experienced.

³¹ Similarly, the HFIAS score can be categorised into increasing food security categories (from one to four), based on the response to the questions based on frequency. A higher value in the categorical variable again implies more food insecurity.

more treated households report being food secure (21% as opposed to 16% in the comparison group). A large part of this difference is driven by the considerably larger share of comparison households (55% as opposed to 48% in the treated group) that are severely food insecure.

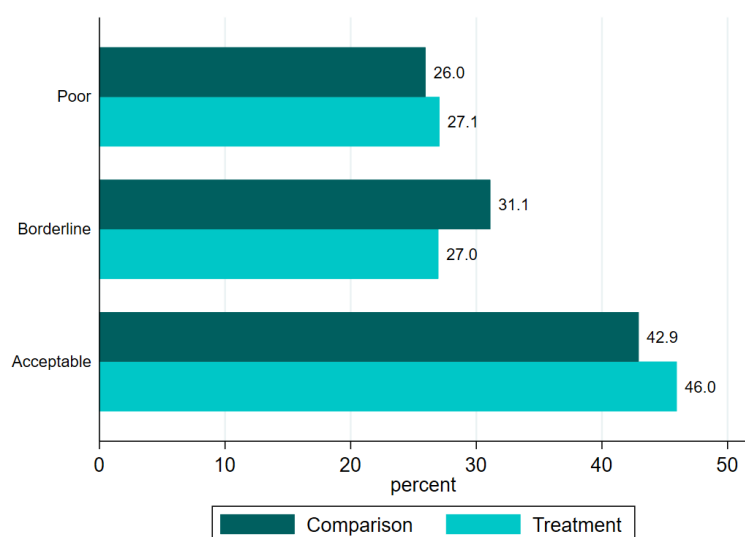
Figure 12. Food security (HFIAS) categories



Source: Own elaboration based on endline household survey

123. The Food Consumption Score (FCS) does not appear to differ between the two groups (Table 22). Categories for the proportions of households that are poor, borderline or acceptable in the FCS categories were also created and are depicted in Figure 13. A larger share of treated households (46%) appears to have acceptable FCS, as opposed to comparison households (43%). This difference is mirrored within the category of households that are considered borderline in FCS (with a score between 21 and 35), where 31% of comparison households and 27% of the treated households are categorised. The share of households reporting poor food security is around a quarter of the sample in both groups.

Figure 13. Food consumption score categories (cut-offs at 21 and 35)



Source: Own elaboration based on endline household survey

124. Finally, the food consumption behaviours reported by the households, in response to a shock, are tested using the reduced consumption strategies index (rCSI). The number of food-related behavioural strategies that were reported by the households is considerably lower (by 3.6) for SIPE households, as opposed to those in the comparison group (who scored 14 on average). While changes in behaviours related to saving, credit, sales and types and number of income sources and assistance did not vary as much between the two groups, the food consumption behaviour of households in the treatment and comparison group was vastly different and deteriorated much more in the comparison group.

Finding 23: SIPE households do not report better dietary diversification (EQ 7.2).

125. Dietary diversification, measured through the Household Dietary Diversity Score (HDDS), is found to be similar in both groups (Table 23). On average, both groups reported consuming food from five categories (out of a total of 9) in the last seven days.³² Again, it is important for the readers to remember that the timing of the evaluation was nearly two years after the end of the programme, in which case the effects of SIPE payouts may have been eroded.

Finding 24: SIPE households have no observed impact on level or composition of food expenditure (EQ 7.3).

126. No impact is observed on the level of household food expenditures (column 2), or the share of total household expenditures spent on food (column 3), as shown in Table 23. This is in line with the findings on there being no impact on household income either (again two years after the end of the programme).

³² Usually, HDDS uses twelve categories and 1 day recall, but to shorten the length of the questionnaire (as commented at inception), we decided to use the FCS categories (nine) and questions to construct the HDDS, removing that module entirely from the household survey.

Table 23. Impact of SIPE on level and composition of food expenditures

	Household Dietary Diversity Score (9 FCS categories and 7-day recall)	Household expenditure on food	Share of food in total household expenditure
Difference (ATET)	0.342	-92.99	0.0643
	(1.62)	(-0.33)	(0.05)
Comparison group mean	5.250***	5623.5***	75.98***
	(35.27)	(29.29)	(72.01)
Obs.	2112	2112	2101

Note: The table shows the average treatment effect on the treated (ATET) estimated using a double-robust matching (IPWRA) approach. Standard errors are shown in parentheses. Significance levels indicated through: * p<0.10, ** p<0.05, *** p<0.01. The values for sales or income are presented in ETB.

2.5. Sustainability (EQ 8)

Finding 25: The SIPE programme successfully employed a multi-stakeholder approach involving various national, regional and local agencies. Strong partnerships with woreda-level livestock and agriculture offices, as well as regional bureaus, were highlighted as key to the programme's success, which have had lasting positive impacts on the communities. There is, however, room for improvement in establishing stronger collaboration with other Humanitarian Development and Peace (HDP) actors. (EQ 8.1).

127. The SIPE programme used a multi-stakeholder involvement approach, with each stakeholder playing a role in the implementation. The WFP collaborated directly with the MOA, various insurance companies, microfinance institutes (serving as payout delivery channels), Mercy Corps, regional and woreda/kebele level BoANRD and BoLPD. Through this collaboration, these stakeholders engaged in planning, targeting, registration, implementation and monitoring activities. Key informants indicated that the SIPE programme benefited from particularly strong collaboration with woreda-level livestock and agriculture sector offices.

128. Key informants from SIPE programme staff indicated that, at the regional level, the programme worked very closely with BoARND and the BoLPD. There was also close collaboration with the PSNP coordinating office which was directly responsible for programme implementation.

We collaborate with the Regional Bureau of Livestock, Regional Bureau of Agriculture, Microfinance or what is now called Shabelle Bank, to handle all related financial and payment tasks. At a Woreda level the Livestock and Agricultural Bureau has assigned one person from each office for the SIPE program. So, we have very good relationships with regional and Woreda-level government officials. ...In Jijiga, in the beginning, there was a livestock insurance team/working group that was led by the Bureau of Agriculture, co-chaired by the Bureau of Livestock, and where WFP was a secretary. This team used to meet every month and solve any issues encountered during the programme. (WFP Programme staff)

129. Programme staff mentioned a few success stories that demonstrated the positive impact of effective collaboration on programme implementation. One key informant mentioned how various stakeholders worked together to address severe drought conditions in certain woredas, where a substantial number of livestock were dying. He recalls that this collaboration expedited the provision of animal fodder by facilitating purchases from neighbouring woredas. This and similar collaborative responses helped save the rest of the beneficiaries' livestock.

130. In another instance, where certain programme implementation areas suffered from programme severe

water shortages, a key informant reported how the programme facilitated the construction of boreholes in collaboration with various stakeholders. Similarly, water was diverted to irrigate grazing lands, which helped save the lives of many livestock in Byollew and Siggole villages. Key informants mentioned that these community assets are still functioning and are highly appreciated by the community as one of the programme's enduring outputs.

131. However, in terms of setbacks, key informants from the regional government bureaus mentioned disagreements caused by competition for programme ownership and administration between the BoANRD and the BoLPD. As a result, considering the programme's alignment, it was transferred to the Bureau of Agriculture, as the PSNP fell under the jurisdiction of the agriculture office.

132. Beneficiaries recalled using their livestock insurance for personal consumption during shocks. This indicates that there is a need for stronger collaboration with other Humanitarian Development and Peace (HDP) actors to provide different kinds of assistance to the beneficiary communities.

Finding 26: Key informants identified two main challenges to effective collaboration in the SIPE programme between all stakeholders: lack of commitment from stakeholders due to heavy workloads, and insufficient interest from and understanding within private livestock insurance companies. (EQ 8.2)

133. As mentioned above, the SIPE programme involved WFP working with several governmental entities, mainly MoA, BoANRD, and BoLPD. Key informants explained how different stakeholders contributed to the programme within their area of specialisation. The programme also created a collaboration with private insurance companies and microfinance institutions to provide financial services, including registration and opening of beneficiary accounts. The Ethiopian Meteorology Institute also played a role by providing weather forecasts and early warnings.

134. Key informants mentioned two main challenges that stood in the way of more effective collaboration among stakeholders. The first challenge was a lack of commitment, with some meetings and appointments being delayed or cancelled due to participants' heavy workloads or overlapping schedules. One key informant noted that this issue could have had a more serious negative impact on the programme had it not been for the dedication and readiness of SIPE focal persons recruited and assigned by the woreda livestock offices. The second challenge was the lack of interest of private insurance companies in providing livestock insurance. This reluctance could partly be attributed to their limited understanding and experience with this type of insurance. Interviews revealed a need for greater efforts to engage insurance companies and encourage their active participation.

135. A key informant from one of the insurance companies argued that the nature of agricultural index insurance product is considered as a nonattractive venture to the private sector because it is considered a less lucrative business than other insurance products. He argued that this was the main reason that private insurance companies lack interest to engage in it. He mentioned that most private sectors are oriented to the products generating a lot of profit and in the short run. Similar to the suggestion from KIIs with implementers, he also mentioned that there is, among staff of insurance companies, lack of expertise in the area of agricultural insurance and suggested the government to play a central role of coordinating efforts of different stakeholders to facilitate insurance services for the agricultural sector.

"To make this agricultural index insurance is something that cannot be done due to a number of reasons. For one, agricultural index insurance is not a sector expected to generate profit in the short run. It requires strategic thinking and planning for the long run, which is not commonly how things are done. ... The second is the lack of capacity, as each insurer needs to have professionals trained in agricultural insurance and climate-related changes. The other important issue is the lack of financial literacy from the beneficiary side to enhance the uptake of agricultural insurance (livestock or crop)."
(Insurance provider staff)

Finding 27: Two approaches were proposed to improve collaboration: one focusing solely on

government structures for implementation, and the other recommending a hybrid model involving both governmental and non-governmental actors. The latter was preferred, with suggestions to adjust insurance policies and engage the private sector more actively and in various other areas of the value chain (EQ 8.2).

136. To achieve better collaboration, key informants suggested two different approaches. Some suggested relying solely on the government's structure to implement programmes effectively, citing security concerns and the government's ability to organise and reach beneficiaries even at the grassroots level. Others advocated for a hybrid approach, involving a mix of governmental and non-governmental actors. Programme staff supported this second suggestion, arguing that the effectiveness of the programme would be enhanced by involving non-governmental implementing partners, such as NGOs, who are specialists in certain areas.

137. Concerning the Public Private Partnership (PPP) in the SIPE programme, some key informants also pointed out that insurance policy adjustments and other measures must be taken to encourage greater involvement of the private sector to take over insurance service provision independently. Moreover, they noted that while most of the attention was given to the involvement of private sector insurance companies, the partnership should go beyond this sector to provide more holistic support to improve the livelihoods of beneficiaries. They suggested collaborating with forage suppliers, water suppliers, livestock merchants (including exporters), dairy processors and similar stakeholders.

Finding 28: SIPE livestock insurance scheme is more effective and provides greater long-term benefits than conventional emergency assistance (EQ 8.3).

138. Key informants believed that the programme's livestock insurance scheme was more effective than conventional emergency assistance in terms of cost and long-term benefits to beneficiaries. They agreed that while conventional emergency assistance is important and a necessary short-term solution to shocks, saving livestock lives has a more lasting impact on beneficiaries at a lower cost. Even if the cost-effectiveness calculations suggest that the cost per beneficiary was close to 200 USD per beneficiary, it must be kept in mind that there were several noted benefits of the programme, persisting nearly two years after the end of the programme. While there were not related to income, or expenditures, or higher-level outcomes such as food consumption and dietary diversity, the enhanced number of productive assets, amount of land owned and the general improvement in financial services used are indicators of how other facets of the beneficiaries' decision-making were affected through the programme. These are elements that are likely to lead to longer terms benefits as well. The lack of impact on more substantial outcomes such as level of income, schooling, and overall wellbeing may be attributed to a shorter time frame along which these effects persist.

139. Additionally, key informants argued that emergency food or cash assistance can create dependency within the community. The following statements from different key informants support this view.

PSNP beneficiaries may accumulate assets, but they lose these assets when any shock, such as drought, occurs. The livestock insurance approach has saved the lives of many livestock and pastoralists but is also changing their lives sustainably. Because once the pastoralists are saved from a shock such as drought, then the saved asset regenerates more income and helps them to cope with any further shock in the future. (National stakeholder representative)

Conventional emergency assistance is more costly compared to the SIPE approach because it costs a lot of money at once. For the short term, conventional emergency assistance is assumed to be better as it may save the life of the whole household members, but the SIPE is good for long term benefit of the community ...the SIPE focuses on sustainably solving the community problem and saving livestock of the community. (Regional bureau representative)

SIPE programme is about protecting assets and livelihood. This means, if one has five cows and is insured, then each livestock is protected. Then by next year, these livestock will be able to grow, multiply, and increase in number, which also increases the asset and income of the household. But the conventional emergency aid is not a long-term solution. Emergency assistance approach

has been applied for many decades but has impacted no lasting change in the life of the household. (Programme Staff)

Finding 29: The SIPE programme incorporated gender mainstreaming by ensuring gender equity in beneficiary selection. Beneficiary participation was found to be balanced, and female beneficiaries were more engaged in certain components such as VSLAs and demonstrated more effective use of insurance payouts. The programme also incorporated gender mainstreaming by training implementers and aiming for gender balance in staff recruitment. However, while gender mainstreaming training was effectively provided, most programme staff, including woreda focal persons, were male. The programme had also taken measures to meet the unique needs of women by incorporating a VSLA component and digital finance services while considering their safety and reproductive responsibilities during assignment for public works (EQ 8.4).

140. According to key informant interviews, gender mainstreaming was taken into consideration in the design and implementation of the programme. Three key areas were identified in the design: training implementers in gender mainstreaming, upholding gender equity in the beneficiary selection process and ensuring gender equality in the project staff recruitment process. Consequently, efforts were made to maintain gender balance among beneficiaries and programme staff members, in addition to offering training to all stakeholders and implementers.

141. However, interviews with key informants, also revealed that most programme staff, including woreda-level focal persons, were male. Calls for application for the position of woreda focal persons were open to both men and women, however, applicants were mostly men. Despite this, gender mainstreaming training was effectively carried out in collaboration with the WFP's gender and protection team. According to key informants, the gender mainstreaming training, was provided to both beneficiaries and implementing partners, including regional and woreda-level government officials and woreda-level programme focal persons.

Regarding staffing, we did not have women working as focal persons involved in this programme. However, the staff involved in the implementation of the programme have participated in gender mainstreaming training. (Programme staff)

142. The programme also attempted to include an equal percentage of beneficiaries of both genders. However, the number of beneficiaries that was intended to ensure gender balance was adjusted because of the limited number of female-headed households in the area where the programme was implemented.

For the SIPE program, in the planning, 50% or half of the targeted beneficiaries were designed to be female. This was one of the criteria we were also following seriously. This is just as per our policy and guidelines. (WFP Programme staff)

143. There were also instances where women made up the majority of beneficiaries in some programme component. This was the case for the VSLA membership. Discussions with programme staff and beneficiaries highlighted this trend, pointing to women's greater interest and prior experience in the savings culture as a reason behind it. There were also some key informants and beneficiaries who argued that female beneficiaries benefited more from the insurance payouts because they used the money more effectively than their male counterparts, concluding that the equal targeting of both genders contributed to the programme's effectiveness.

When we come to the livelihood component (of the programme), we find that most of the beneficiaries engaged in the Village Saving and Loan Association (VSLAs) are females. Women were more engaged in saving culture. So, in the livelihood components... the VSLAs, overall 80%

are women participating. But in entire programme, participation is 52 to 48% for women and men beneficiaries respectively. Even though VSLA membership was open for both males and females, most of the time men's savings are very small. So we find that mostly women are interested in it. (Programme Staff)

144. In staffing, as in other programs, SIPE utilised the expertise of WFP's Gender and Protection team and had senior specialists for guidance. A KI informant indicated that, during planning, gender-specific indicators were established, with targets disaggregated by gender. At this stage, both men and women participated in the consultation meetings during the needs analysis of the programme.

145. The informant explained that Initiatives such as the Village Savings and Loan Associations (VSLAs) and Digital Financial services were provided to meet the specific needs of men and women, especially focusing on female-headed households. As part of the efforts to tailor activities to the needs of women, the VSLAs helped to reach and benefit more women while the digital financial solutions helped protect women from fraud and theft during financial transactions.

146. Regarding communal asset creation activities, women-headed households were favoured not to travel too far watersheds from their homesteads. In addition, breastfeeding and pregnant women were taken off from having to provide labour contributions for public work.

147. The key informant mentioned that the gender-disaggregated monitoring mechanism revealed a participant ratio of 48% men to 52% women with no significant differentiated outcomes between the two genders reported.

Finding 30: The SIPE programme alleviated the frequent food shortages by enabling beneficiaries to maintain livestock, which provided a steady source of milk and other animal products and helped improve food security. Additionally, community asset-building activities, such as water diversion and land rehabilitation, supported livestock productivity and indirectly improved nutrition. (EQ 8.5).

148. In general, beneficiaries reported recurrent food shortages. While many indicated that severe food shortages were uncommon in their community, they explained that obtaining nutritious and quality food in the right quantities and at the right time was a persistent and serious challenge, and priority was commonly given to children.

You can know just by looking at my face, ...anybody can understand our situation just by seeing our face. (Female beneficiary, East Imey) I have experienced lack of food in my family, this could be because of lack job opportunities and being unable to get any farming products because of flood. Sometimes it becomes challenging to cover household needs. When there is a shortage of food, then the available food is given first to the children followed by women and then a man because men are more resistant. (Male beneficiary, East Imey)

149. FGD and IDI participants identified several reasons for the food shortages experienced by the community. These included inflation and high food prices, drought, floods, and improper utilization of support. Most of the FGD and IDI participant beneficiaries cited recurrent drought, which negatively impacts livestock and crop productivity, as the major cause of food shortages and malnutrition. Pastoralists rely primarily on animal products, such as milk, for consumption. When livestock productivity declines, milk production decreases, leading to malnutrition. Additionally, the lack of nutritional awareness contributed to malnourishment, even among those with access to food. For example, one programme staff explained that although children and lactating women need to consume a variety of foods, many mothers lack sufficient knowledge about proper nutrition.

150. According to FGDs with beneficiaries and KIIs with programme staff, the SIPE programme has helped households to cope with food shortages in two key ways. First, beneficiaries used the insurance payouts to cover livestock-related expenses benefited in the long run. They were able to maintain their livestock as an

asset and continue to consume animal products such as milk from their livestock. According to some interviewees, they also received a higher income from selling animal products, with which they were able to use to purchase other food items, thereby gaining access to a better variety of food. One key informant noted that beneficiaries who already had a relatively better economic capacity were able to invest the payouts in maintaining the wellbeing of their livestock, as intended by the programme. Conversely, beneficiaries facing greater economic challenges were compelled to use the payouts directly to purchase food during severe shortages. Although this use diverged from the programme's primary intention, in both scenarios, the SIPE programme made a positive contribution to enhancing the food security for these households.

151. In addition to the insurance payouts, other programme components such as community asset building also indirectly contributed to food security and nutrition by helping to maintain livestock productivity.

Even if we didn't work directly with activities related to nutrition, we have contributed indirectly for the improvement of nutrition. Through the water diversion and range land rehabilitation, we have improved the pastureland. This leads to improvement in production of milk and meat for household consumption which will improve nutrition and combat malnutrition. This is how we contributed to fight against malnutrition. The other activities had effects on malnutrition is VSLA. When women receive some money from this saving group, they use it for the household which could be for their children's school or nutrition support. We have helped provide agricultural inputs such as improved seeds, fuel, and others to support their farming activities and this will also help to improve nutrition of the households. (programme staff)

2.6. Key Lessons (EQ 9)

Finding 31: Key informants highlighted several best practices implemented within the SIPE programme, such as the reliance on a feasibility study that involved multiple stakeholders and community members, leading to the successful introduction of a livestock insurance scheme, which has gained attention from the Government of Ethiopia and other organizations. Additionally, targeting an equal percentage of female beneficiaries ensured further enhancing the programme's effectiveness on the more vulnerable sections of the population as well (such as female headed households) (EQ 9.1).

152. One of the good practices highlighted by key informants was the programme's reliance on a feasibility study involving multiple stakeholders and community members. This study was particularly appreciated because it led to the introduction of the relatively new livestock insurance scheme, which was seen by study participants as a better approach to assisting the beneficiary community. As a result of the assessment and because of the SIPE programme, livestock insurance is gradually gaining attention from the GoE.

It is a great lesson for WFP, and other humanitarian aid organizations, bringing the index insurance to the country and the community is a great achievement by itself.... WFP's experience in this programme can be a good lesson for other humanitarian organizations, as it indicates that it is possible to change the humanitarian aid system in to more of developmental and life changing interventions. ... Now the project has at least created awareness about how the pastoralist can save themselves and their livestock from any shock by utilising index insurance. It also created awareness for the insurance companies that they can engage in such kind of insurance product. (National stakeholder, Addis Ababa)

153. The programme also saved the community from losing many of its livestock. Many beneficiaries and community leaders shared their experiences of the programme in similar ways to the following interview participant from East Imey Woreda.

As a community, we have benefited a lot from the SIPE programme, and the main advantage is that our livestock were saved from shock and our animals still exist... and they are providing

service for our family. If we didn't receive that support, our livestock would not have survived, and we would not be left with any livestock by now. Thus, it was a very useful programme for our community. (Community leader, Adadle)

154. The programme's target to reach an equal percentage of female beneficiaries was also mentioned as a strength because, according to some beneficiaries, women were more likely to spend the insurance payouts on fodder or veterinary services for their livestock, as intended by the programme.

The women were mostly using the payout money properly compared to the men ...but we can't say no one used the money for unintended purposes...there are some (men), who use the money for their addiction or anything else. (Male beneficiary, East Imey)

155. However, when comparing the share of households reporting that they would spend the payout on livestock related activities, this did not turn out to be true. Fewer female headed households reported that they would spend their payouts on livestock (Table 52) and their actual reported livestock expenditures were also lower (Table 29). Nonetheless, the improvement in other indicators (such as food security, or financial services and access) for female headed households does indicate that their inclusion led to improvements that may have otherwise not been feasible for them.

Finding 32: Several suggestions to improve the relevance and effectiveness of the programme were provided by key informants, such as affordable beneficiary contributions, holistic supports against various types of shocks, ensuring better integration within the livestock insurance sector and improving awareness and understanding of livestock insurance (EQ 9.1).

156. One improvement suggested by a key informant was that having beneficiaries pay an amount of the premium that they can afford would enhance the sustainability of livestock insurance. In this way, they argued, beneficiaries will have a better opportunity to understand how the insurance scheme works and develop a greater sense of ownership of such programmes and the community will gradually take over the payment of insurance premiums, making such interventions sustainable.

157. Beneficiaries and stakeholders also recommended strengthening the relevance and coherence of the programme by adopting a more holistic approach to supporting community needs. Beyond drought and its impact on livestock, beneficiary communities faced multiple shocks, including frequent flooding and crop diseases, among others. Therefore, many interviewees suggested that humanitarian organizations and the government collaborate to synchronise their interventions. This coordinated and holistic approach would more effectively address various community needs, ensuring sustainable results by complementing efforts.

158. Another argument is that more integration needs to be made beyond the insurance sector. Unless these pastoralist communities are assisted to improve their livelihoods, they will not be able to use the insurance payouts for the intended purpose and may use the payouts to cover expenses for their consumption. This is why, key informants argue that SIIPE or similar programmes need to be integrated with other programmes working on income-generating and livelihood-improving activities. Considering the religious context of the beneficiary communities, another suggestion from a key informant was to offer Sharia-compliant insurance. This, it was argued, would significantly enhance the uptake of insurance within the predominantly Muslim community.

159. The need to work more intensively on raising awareness, especially regarding insurance schemes, was also evident from interviews with beneficiaries and other programme stakeholders. Since beneficiaries in the area were used to receiving aid, there were still cases where they had not developed a clear understanding of the livestock insurance scheme offered by the programme. C4ED acknowledges that recall bias may have contributed to the responses of some of the beneficiaries who had confused the programme with other financial assistance they had previously received. More awareness-raising was suggested not only for beneficiaries but also for public and private institutions and stakeholders, including government bureaus and insurance companies, all key stakeholders in the SIIPE programme.

Finding 33: The assessment of the SIPE programme's Results Based Framework revealed several shortcomings, but key informants provided a more positive perspective, noting that the programme had a comprehensive monitoring and evaluation system. The collaboration and participation between government bureaus and the WFP in these monitoring and evaluation efforts was highly appreciated for its thoroughness and complementarity (EQ 9.2).

160. The assessment of the programme's updated Results Based Framework identified certain shortcomings (missing and non-disaggregated indicators and targets, for instance) in the reporting system (as mentioned in section 2.2). However, these findings were not necessarily aligned with the qualitative interviews. According to key informants, the SIPE programme had a monitoring and evaluation system that used a predefined checklist for monitoring and evaluating operations that included information regarding the types of activities carried out, by whom, which kebele and project sites they took place in, and who benefited from them. Monitoring included data collection through surveys and direct visits to the community and beneficiaries. Reporting also took place through quarterly and annual review meetings. Furthermore, after the conclusion of the pilot programme, an impact evaluation was reportedly conducted to analyse the programme's contribution and check whether it resulted in any unintended effects on the community. As a result of this, the informants provided an overall positive response to the way in which the system was set up and operated.

161. It was also revealed that the regional BoANRD participated in the programme monitoring and evaluation operations. Key informants from governmental bureaus expressed their appreciation for the programme monitoring system, because, they stated, it was jointly performed by a government bureau (BoARND) and WFP.

Most of the time, they complement one another. Since the programme is one, we make a joint plan and monitoring is also done jointly. Therefore, they (government bureaus and WFP) know each other, and they work together in a way that one covers what the other missed. This makes for a holistic work...(done) together. (Government Official, Jijiga)

2.7. Cross-cutting Issues (EQ 10)

Finding 34: The SIPE programme identified capacity gaps in agricultural insurance and climate science among insurance companies and government offices. (EQ 10.1).

162. The SIPE programme's novel concept highlighted gaps in expertise among insurers, agricultural sector workers, and government agencies. Considering these gaps among stakeholders, the project proposal was carefully devised. Initially, WFP developed the design, and ILRI provided technical advice and support. Subsequently, government offices, particularly in the agriculture sector, were also engaged as stakeholders in the implementation process, including regional BoARND and regional WFP programme staff. A representative from an insurance company noted a significant capacity gap even among individuals working in agricultural insurance, underscoring the importance of government involvement and continued awareness raising. It was emphasised that each insurer should have professionals trained in agricultural insurance, including experts in climate science, but this aspect was not adequately addressed.

Agricultural insurance is not viewed as a lucrative business by the private sector, leading to a lack of interest in participation. To address this issue, greater government involvement is essential. In Ethiopia, most insurance companies often prioritise short-term profits, overlooking the strategic approach required for agricultural insurance, a critical missing component in the country. Despite these challenges, the SIPE programme has aimed to implement initiatives under such circumstances through continuous awareness campaigns (Insurance staff, Addis Ababa)

Finding 36: The SIPE programme ensured fair implementation by continuously collecting information and establishing a complaints and feedback mechanism. While some beneficiaries

used this system, others were either unaware of it, felt excluded due to errors, or had no complaints (EQ 10.3).

163. The SIPE programme sought to ensure fair programme implementation through the continuous collection of information including from the community representatives to take proactive measures. The second approach was establishing a complaints and feedback mechanism. Feedback and complaint mechanisms were provided to receive feedback from the beneficiaries and others, especially on the beneficiary selection process, distribution of payouts, gender and other related issues.

164. During the recruitment phase, a recruitment committee was established, and beneficiaries were encouraged to report any issues to the committee. The committee then investigated the complaints and reported these to the beneficiaries.

There was also a free call centre in Addis Ababa (free hotline number 6065). Beneficiaries used the number to call and give feedback or report any complaints. For instance, personally, I only knew about complaints mainly related to the payout. We have an operator who takes the calls and forwards the complaints to the concerned body to solve. (programme staff, Jijiga)

165. Accordingly, some beneficiaries reported having used the system to present their complaints. Others knew about the system but did not have any complaints to report. A third type, however, reported that they had complaints or feedback but were unaware of how the system worked or even that such a system existed.

For example, during registration, a Kebele leader used to support implementing stakeholders and he had a list of beneficiaries registered for the programme and submitted this. Later on, however, there were some households who missed their name from the list, and they were told that it was missed when they transferred hand written list to computer. The members believed that they were dropped out by the Kebele leader, However, there was no means to give/forward the concern. The implementing organization didn't prepare a means to send our feedback. Those missing their name didn't get any solution and remained excluded from the programme without any explanations. If there were secret means of giving feedback available, we would have sent our complaints to the concerned body to get response on that issue. (Male beneficiary, East Imey)

Finding 37: Potential risks were anticipated during the SIPE programme, and protective measures were implemented. WFP emphasised protection risks as a guiding principle and ensured beneficiaries were well-informed about the programme and their entitlements, enabling them to make informed decisions and reducing potential risks (EQ 10.4).

166. Key informants stated that potential risks were foreseen during the programme implementation period and protective measures were taken against them. For instance, during the disbursement of payouts, beneficiaries were made to receive their insurance payouts in their specific area/village, to prevent any problems they might face on the road when traveling to other areas. To facilitate the delivery of payouts, one key informant explained that cashiers were deployed in each locality. Protection risks were said to have been taken seriously by WFP, as one of its guiding principles. Providing sufficient information to beneficiary communities about the programme and their rights and entitlements contributed to mitigating protection risks by helping people to make informed decisions about how to engage in programmes.

Finding 38: The collaboration of the SIPE programme with other Humanitarian Development and Peace (HDP) actors was reported to be in its early stages, with interest therein, but not yet fully operationalised cooperation. Promising collaboration occurred between the government, WFP, and Mercy Corps, particularly at regional and local levels (EQ 10.5).

167. Some key informants explained that the collaboration of the programme with other Humanitarian Development and Peace (HDP) actors is in its beginning stage. Even though there is an interest between the development actors, donors, and humanitarian partners to work in collaboration, this collaboration has not

yet been fully operationalised.

168. However, there were also mention of promising collaborative work between the government, WFP, and Mercy Corps. Key informants recall that during the implementation of SIIPE, there was strong collaboration and coordination at the regional, zonal, and woreda levels.

169. The programme involved Mercy Corps as the implementer of its livelihood component. According to key informants, the SIIPE programme has established the VSLA groups as a self-help group, made to save money and use it accordingly in the form of loans to its members. In the process, training and technical support were given. Beneficiaries reported that they benefited from the VSLA membership because they could borrow money when they needed it. The beneficiaries/members indicated that they learned a lot about saving money and are committed to continue with it.

170. In addition to the establishment of VSLAs, selected and better performing VSLA members were trained to become Community Animal health Workers (CAHWs). A few key informants stated that the SIIPE programme helped to establish a veterinary pharmacy for the community to purchase drugs at affordable costs. For instance, the programme has helped to open a veterinary pharmacy in Adadle woreda. The VSLA group members were intentionally selected and trained as CAHWs to facilitate access to pharmacy services, distribute drugs, and also provide basic animal health services to the community, saving the time and cost of going to the city to buy drugs. WFP provided technical support to the VSLAs, such as training for CAHWs, providing financial and material support.

3. Conclusions and recommendations

3.1. Conclusions

171. The SIPE programme aimed to bolster the resilience of pastoral households in Ethiopia against drought-induced shocks and to promote sustainable food security. By providing insurance that enabled pastoralists to purchase essential resources during severe droughts, the programme sought to reduce vulnerability, enhance livelihoods through the creation of CBDRM assets, and improve overall household confidence and wellbeing. Additionally, SIPE aimed to increase insurance awareness and financial literacy among the pastoral communities. The evaluation provides critical evidence-based findings and recommendations to guide WFP's future strategies and actions, ensuring that the lessons learned are disseminated and integrated into future initiatives for the benefit of all stakeholders involved.

172. This report assesses the performance of SIPE in enhancing pastoralist households' resilience to drought-related shocks while simultaneously achieving food security. Through these findings, it seeks to provide impartial evidence of the actual impact of SIPE on stakeholders and partners. At the same time, the learning objective is to uncover the reasons behind the results, identifying good practices and offering learning pointers for future programming. This evaluation should therefore facilitate decision-making regarding the programme's scalability and replicability and provide suggestions for potential improvements for future initiatives.

173. The evaluation, conducted using a mixed-methods approach within a quasi-experimental design, sought to understand how the program mitigated drought-related risks and influenced participants' financial and consumption behaviours, while assessing changes in household wellbeing attributable to the intervention. The evaluation was structured around the OECD/DAC evaluation criteria, covering relevance, effectiveness, efficiency, impact, and sustainability, along with cross-cutting themes. These evidence-based findings offer valuable insights and recommendations to inform WFP's future strategies, ensuring that lessons learned are effectively integrated into upcoming initiatives for the benefit of stakeholders..

Conclusion 1: The SIPE programme aligned well with WFP's goal of providing sustainable solutions through effective coordination with Ethiopian government agencies. However, challenges such as a complex enrolment process and lower-than-expected compensation were noted. While innovative efforts were made to deliver livestock insurance and bridge capacity gaps, there remains room for improvement in programme design and implementation.

174. The evaluation concludes that the SIPE programme in Ethiopia was highly relevant to WFP's objectives of enhancing the socio-economic conditions of pastoralists and agro-pastoralists. This relevance was demonstrated through extensive stakeholder engagement at national, regional, and local levels, including governmental bodies, research institutes, insurance companies, and community representatives. Consultation processes led by ILRI and WFP facilitated adjustments in programme design based on bio-physical and socio-economic contexts, ensuring alignment with community needs. Moreover, the active involvement of stakeholders such as Shebele Bank in logistics and digital banking underscored the programme's comprehensive approach to implementation and potential sustainability (Findings 1 and 31). SIPE's collaborative approach with the Ethiopian government and key stakeholders contributed to its success and aligns with one of the strategic objectives 5 of WFP Ethiopia, partnering for SDG results.

175. However, when analysing household perceptions on insurance, around 51% of the total sample found the insurance enrolment process difficult and the premium too high. Additionally, 47% of the households reported that the insurance compensation was lower compared to the actual loss (Finding 2). Nonetheless, three out of four beneficiaries found the insurance to have value in terms of time and money.

176. The SIPE programme also identified capacity gaps in agricultural insurance and climate science among

insurance companies and government offices (Finding 32). To address these gaps, the programme focused on government involvement and continuous awareness campaigns, despite the private sector's lack of interest due to low profitability (Finding 34). Capacity-building efforts for stakeholders included preparing training modules and conducting training sessions. These sessions were also extended to communities in order to improve participation in and perceptions regarding insurance; these awareness activities were not entirely successful as awareness gaps were noted, nonetheless (Finding 35).

Conclusion 2: The SIIPE programme reached 94% of its target beneficiaries but faced challenges due to labour and budget constraints. Success factors included strong collaboration, full premium coverage, and livestock protection, while issues like limited stakeholder understanding and satellite reading difficulties hindered progress.

177. The 2021 Updated Results Measurement Framework Annual Report indicates that the SIIPE programme reached nearly 94% of its target beneficiaries but lacked data on the timely receipt of payouts and annual progress against targets (Finding 3). While fewer households faced insufficient food consumption and emergency coping strategies, more households resorted to crisis coping strategies. The programme met targets related to insurance coverage, mobile money usage, and access to animal health services, but fell short on access to inputs, training for Community-based Animal Health Workers, and early warning mechanisms. The data were aggregated, hindering gender-specific analysis of the SIIPE programme effectiveness.

178. Qualitative evidence suggests that PSNP beneficiary households contributed to the SIIPE programme by participating in the PSNP scheme for additional days. This initiative resulted in the creation of various community assets such as irrigation canals, roads, water wells, public toilets, range land development, and tree planting. However, several barriers to the sustainable creation and maintenance of these assets were identified. Challenges included the labour and capital-intensive nature of some projects, lack of commitment from beneficiaries and community members, and the need for additional budget allocations for certain activities. As a result, some community assets were not properly maintained and fell into disuse over time (Finding 4).

179. The SIIPE programme benefited significantly from strong collaboration among stakeholders and full insurance premium coverage, which facilitated its effectiveness in protecting livestock, a critical asset for pastoralist communities and contributing to WFP Ethiopia's strategic objective 1, which is to end hunger by protecting access to food. However, challenges such as stakeholders' unfamiliarity with livestock insurance and delays in insurance payouts challenged the programme's implementation and its effectiveness. Misunderstandings regarding satellite readings and constraints in mobile banking accessibility further complicated efforts to deliver timely and adequate support to beneficiaries. Moreover, some beneficiaries diverted payouts for household needs due to the absence of additional humanitarian and development aid amidst multiple shocks like droughts and floods. These factors underscore the complexities faced in achieving sustainable impacts in pastoralist communities, exacerbated by logistical barriers during adverse weather conditions and the COVID-19 pandemic.

Conclusion 3: The efficiency of the SIIPE programme couldn't be assessed due to missing expenditure and beneficiary data. Improved tracking of costs and outputs would enable more accurate cost-efficiency analysis in future programmes.

180. Evaluating the cost-efficiency of the SIIPE programme was challenging due to the lack of detailed expenditure data, limiting conclusions about its efficiency. The evaluation matrix proposed comparing input costs with outputs like beneficiaries reached and resources used, but this was hindered by the absence of disaggregated data, both regionally and by gender. Although the overall cost per beneficiary was estimated at \$200, there was no data to compare this with other programmes. SIIPE's innovative aspects, such as the pooling of insurance companies and integration with government schemes, further complicate comparisons with other insurance programmes due to the uniqueness of its approach and the lack of comparable data

(Finding 5).

181. To ensure a decent cost-efficiency analysis, detailed information on the inputs and linked outputs, by year, region and gender (where possible) would be necessary. The compilation of such information from the formative stages of the evaluation is critical and should be followed through over the duration of the programme. Independent evaluations of such data within the programme duration may improve the availability of such data for at least some years of the programme, it not from the start.

Conclusion 4: The SIPE programme had an impact on productive resources and decisions of households, but this did not necessarily lead to improved livelihoods (when comparing income or wellbeing indicators). A larger payout, associated with a shorter process may help households carry the effects of the programme on assets and livestock onto outcomes such as income, schooling, and overall resilience.

182. The evaluation of SIPE's impact on pastoral households, particularly regarding income, asset accumulation, and vulnerability, revealed mixed results. Inferential analysis showed little to no significant effect on household income or overall asset accumulation, with livestock sales constituting the main income source for both SIPE and non-SIPE households. However, SIPE beneficiaries reported higher expenditures, especially on livestock-related needs, likely due to severe droughts, which suggests that insurance payouts were primarily used for these expenses. While beneficiaries accumulated more productive assets, there was no corresponding increase in income, indicating that marginal gains were offset by expenditures.

183. Additionally, SIPE households employed fewer coping strategies compared to non-beneficiaries, especially in terms of reducing livestock sales during difficult times. Land ownership was notably higher among SIPE households, possibly because they were able to retain their land for livestock use, unlike non-beneficiaries who may have sold land to meet basic needs. Alternatively, the results suggest that a large share of the payouts were used for consumption smoothing and less than a third was used for livestock activities.

184. However, higher-level wellbeing indicators, such as child labour, early marriage, and school absenteeism, remained unaffected, though female-headed households showed better schooling outcomes, consistent with research linking women's involvement to improved child health and education (Findings 6, 7, 8, 9, 10, 11).

185. Qualitative evidence suggests that while the SIPE programme helped beneficiaries' stability of income and protect family wellbeing, delayed and insufficient payouts, in the context of inflation and fluctuating prices, may have limited the impact.

Conclusion 5: The SIPE program had a positive impact on beneficiaries' knowledge of and attitudes towards livestock insurance. However, programme awareness being still too low and unaffordable premiums were identified as significant barriers to wider insurance uptake.

186. EQ5 assessed changes in awareness, understanding, purchase and use of insurance (payouts) and financial tools and products. A positive impact of the programme was observed on overall insurance awareness, or on knowledge of specific aspects of SIPE. However, there were misunderstandings between PNSP and SIPE payouts within beneficiaries (Findings 12 and 13).

187. Beneficiaries are also more willing to purchase insurance, particularly for shoats. The household survey also indicated that the more preferred source of insurance payments seems to be through livestock sales, instead of wage labour as one would have expected given the SIPE coordination with PNSP. This may be explained by the finding that awareness of programme design and objectives were not clear to many beneficiaries. This also was expressed as the primary barrier in addition to lack of resources in the purchase of insurances. The need for more affordable premiums was highlighted by beneficiaries and key informants for better and prolonged uptake of the livestock insurance (Finding 14).

Conclusion 6: SIPE households use more financial services like formal banking, VSLAs, and

ROSCAs, but mobile banking uptake remains low due to access issues and distrust. Improving mobile banking access is relevant for enhancing livestock insurance adoption.

188. Compared to the comparison group, a larger proportion of households in the treatment group have formal bank accounts, participate in VSLAs and ROSCA, and therefore seem to have achieved greater diversification of access to financial and saving services. Mobile banking coverage and use, however, appeared to be limited, despite programme implementation providing payouts through mobile banking. Limited access and knowledge of mobile banking services implied that many beneficiaries still received the payouts in cash and even preferred this, due to a distrust in digital financial services. The evaluation results suggest that to improve mobile banking usage and trust, additional training on this feature of the SIPE programme is required. Improving transparency may help in the uptake of the payout payment through mobile banking.

Conclusion 7: The SIPE programme offered temporary benefits for livestock management, but these faded after payouts ended, with both treated and non-treated groups facing similar challenges. Reduced livestock numbers and lower market prices in the treated group suggest that the programme's impact was not sustainable without continued support, highlighting the need to reassess the scope and size of livestock insurance.

189. Comparing the number and value of offtakes in the last year, there is no difference between the two groups. This result would at first suggest that both groups experienced a similar (trend in timing and number of) offtakes of livestock, but when comparing the number of livestock in 2019 to that in 2024, the number fell considerably for the treated group as opposed to the comparison group, indicating that the effects of the programme were not sustained after the end of the programme. The increase in offtake in the past year for the treatment group is also visible through a much lower market sale price for shoats and camels (although not for cows) (Findings 17, 18, 21). This implies that advantages that the treatment group has in offtakes and livestock losses during the SIPE programme quickly eroded with the end of the payouts, while the droughts and diseases continued. The need for a large payout amount, potentially covering a diverse set of disasters becomes even more evident through this. Another finding from the trends in losses suggests that although losses are similar over time in both groups, the comparison group's losses are higher during the drought seasons than those of SIPE households (Findings 19 and 20). This implies that even now, households are better able to pace their livestock sales and wait for better prices, as opposed to comparison households that are required to sell off their livestock immediately. This may be linked to the larger amount of land and productive assets owned by beneficiary households, or the use of existing financial services (such as VSLAs or ROSCAs) to create some breathing room before having to sell their livestock.

Conclusion 8: Overall, while SIPE enhanced food security, it did not enhance dietary diversity and influence on food expenditure patterns.

190. EQ7 explored the impact of SIPE on the food security and dietary diversification for treated households. The SIPE programme helped households cope with food shortages by enabling them to use insurance payouts for livestock-related expenses, thus maintaining livestock as an asset and increasing access to animal products and higher income from sales. Beneficiaries with better economic capacity invested in livestock, while those facing severe shortages used payouts to buy food directly. Both approaches improved food security, as indicated by fewer food coping strategies among SIPE households compared to the comparison group (Findings 22 and 30). It was observed that the food security measured by HFIAS and FCS within treated households had improved in the past year with respect to comparison households. However, dietary diversity (measured by reduced HDDS) was found to be unaffected because of the programme (Findings 23 and 24). To affect dietary diversity outcomes, the programme must also increase learning about the benefits of varied food groups, thereby influencing the food expenditure patterns of beneficiary households.

Conclusion 9: The SIPE programme shows promise in enhancing sustainability albeit

challenged by stakeholder commitment and lack of private sector engagement. The effectiveness and sustainable benefits of the livestock insurance scheme over conventional emergency assistance underscore the importance of such innovative approaches in resilience-building programmes.

191. The SIIPE programme demonstrates a promising approach to enhancing sustainability through collaborative efforts and strategic interventions. The programme's robust engagement with government stakeholders at local, district, and national levels, including ministries, bureaus, and safety net programmes, facilitated effective planning and implementation. Despite challenges such as stakeholder competition and private sector reluctance, the programme's multi-stakeholder approach proved to be essential in addressing emergencies such as drought and disease and promoting long-term resilience.

192. The quantitative results suggest that SIIPE households were able to maintain an advantage over comparison households nearly two years after the end of the programme. The most promising indication of sustainability is the larger share of treatment households that purchased livestock insurance and their greater willingness to insure livestock. Nonetheless the lack of evidence related to many resilience outcomes about income, dietary diversity, overall asset accumulation indicates the fast-eroding effects of the SIIPE programme. The evaluation revealed that the programme's considerations of sustainability issues were insufficient and that this challenged the possibility of maintaining project benefits beyond its completion. To enhance collaboration and ensure long-term benefits, adopting a hybrid implementation model with governmental and private sector stakeholders is crucial (Findings 25, 26, 27, 28).

193. Customising insurance premium coverage so that beneficiaries contribute an affordable percentage of the insurance premium was suggested to help instil ownership and ensure continued support and foster sustainability. Overall, the SIIPE programme shows promise in not only safeguarding livelihoods but also in mitigating food insecurity and promoting sustainable development outcomes.

Conclusion 10: The SIIPE programme incorporated gender mainstreaming through training implementers and aiming for gender balance in staff recruitment, but most staff were eventually male (Finding 29). Women beneficiaries showed greater engagement in the VSLAs and made more effective use of insurance payouts, contributing to the programme's effectiveness (Finding 29).

194. While gender mainstreaming efforts were evident in training and beneficiary targeting, there's room for improvement to ensure equitable participation and impact across genders, especially when it comes to gender-balanced recruitment of programme implementers at the grassroots (woreda) level (Finding 29). Despite efforts of gender mainstreaming, it was observed that most staff including woredas level facilitators were male.

195. Simultaneously, women were the main benefactors of the ROSCAs and VSLAs, as suggested by descriptive and qualitative evidence (Finding 29). Participation in such services may have led to an enhanced understanding of savings and overall financial literacy. This improved knowledge reportedly led to increased savings and empowered women to start their own businesses and engage in other income-generating activities. Moreover, the gender disaggregated results suggest that other indicators also improved because of the SIIPE programme. For instance, females were better off in terms of food security, accumulated more assets and had marginally higher number of income sources. All of this implied that they also report fewer livestock losses and generally had to resort to fewer coping strategies. Therefore, it appears that gender mainstreaming within the SIIPE programme seems to have borne results that were favourable to female beneficiaries as well.

Conclusion 11: Despite initial challenges, the programme improved sustainability through capacity strengthening, gender mainstreaming, accountability in the form of feedback

mechanism, and protective measures to mitigate risks for affected populations.

196. To tackle capacity gaps among insurers and government offices, extensive capacity-building activities were led by ILRI, covering topics such as livestock insurance concepts, GIS mapping, and gender mainstreaming at national, regional, and community levels (Findings 34, 35 and 38). However, despite these efforts, capacity gaps remain. Feedback mechanisms such as a free call centre and complaint-handling committees were established to manage concerns about payout distribution and beneficiary selection (Finding 36). Protective measures were integrated to mitigate risks to beneficiaries, even though at an early stage, the collaboration efforts with humanitarian and development actors showed promise, particularly at administrative levels (Finding 37). Despite initial hurdles, the programme has contributed to improvements in fostering sustainable solutions through collaboration and capacity strengthening while ensuring accountability and protection for affected populations.

Key learnings

197. The programme has provided valuable lessons for enhancing its effectiveness and sustainability. Key strengths include its thorough feasibility study involving diverse stakeholders, which introduced an innovative livestock insurance scheme and garnered government and private sector attention. The programme's success in saving livestock and achieving gender-inclusive benefits underscores its positive impact on community resilience that may sustain. The flexibility to modify activities according to feedback from the beneficiaries is another strength noted by key informants.

198. However, challenges such as sustaining the results, satellite data reliability issues, and beneficiaries' use of payouts for alternative expenditures than livestock highlight areas for improvement. Delays in the delivery of payouts, insufficient payout amounts and the lack of humanitarian and development interventions to complement SIPE are some of the weaknesses of the programme. Integrating insurance into broader development efforts, enhancing stakeholder awareness, and exploring Sharia-compliant options to expand uptake are important design changes for future programming. Additionally, strengthening M&E frameworks and fostering collaborative monitoring with government agencies are also crucial for ensuring long-term impact and adaptive management. These insights will guide future initiatives to align programmatic success with developmental goals and build community resilience in pastoralist communities.

199. A strategic vision for future programming inspired by the SIPE evaluation findings would focus on enhancing resilience, sustainability, and inclusivity in pastoral communities. Building on the programme's achievements in risk mitigation and food security, future initiatives could prioritise a similar multi-stakeholder collaboration, involving government, private sector, and local communities more deeply in programme design and delivery. To address challenges of insurance accessibility and perceived value, future programs might explore varied payout structures, adaptable to the level of loss, and more affordable premium options. Expanding financial literacy and digital banking access would empower communities to use insurance products confidently and efficiently. Additionally, strengthening gender-sensitive approaches, such as supporting women's financial participation and leadership in community decision-making, would further equalise impacts of similar programmes. With a robust monitoring and evaluation framework for adaptive learning for wider uptake, these efforts could lead to lasting resilience and development gains for pastoral households in Ethiopia and similar contexts.

3.2. Recommendations

200. By implementing the recommendations presented in the following table, future programmes can significantly improve its outreach, uptake, and impact, leading to better livestock-related outcomes and overall improvements in income and wellbeing of pastoralists in Ethiopia.

201. Given the discontinuation of the SIPE programme, it is unclear whether the stakeholders that have been identified for the recommendations will persist, especially if the programme extension is by other entities, in other areas, or with significant design changes.

#	Recommendation	Recommendation grouping options): (3 By type By theme Short /medium/ long-term	Responsibility (one lead office/entity) ³³	Other contributing entities (if applicable)	Priority: high/medium	By when
1.	<p>Enhanced awareness and education campaigns are key to ensuring high understanding and adoption of the programme</p> <p><i>Sub-recommendation 1.1 (high):</i> Targeted awareness activities could significantly improve understanding and buy-in of the programme. These could include community-based training sessions and workshops to educate pastoralists on the objective and benefits of SIPE, increase their understanding of how satellite data is collected and when it qualifies as a “drought” and alleviate concerns on programme fairness.</p> <p><i>Sub-recommendation 1.2 (medium):</i> Leverage radio broadcasts, social media, and local influencers (or community agents) to disseminate information about the insurance programme, highlighting success stories and practical benefits. It can also be considered an effective medium to remind beneficiaries of how insurance payout and claims processes work.</p> <p><i>Sub-recommendation 1.3 (medium):</i> More awareness creation and training are not only suggested for</p>	Medium term	WFP and Government of Ethiopia (GoE)	Insurance companies and banks	Medium	2024

³³ Unless the evaluation is commissioned jointly with other partners, the lead entity for all recommendations should be within WFP.

#	Recommendation	Recommendation grouping (3 options): By type By theme Short /medium/ long-term	Responsibility (one lead office/entity) ³³	Other contributing entities (if applicable)	Priority: high/medium	By when
	beneficiaries, but also for public and private institutions and stakeholders including government bureaus and insurance companies. With a better understanding of and training on livestock insurance and its long-term benefits, as well as climate science, stakeholders would also be able to collaborate with greater commitment and enthusiasm and identify additional gaps in programming. Although there were concerted efforts by ILRI, the lack of awareness implies that the training needs to be repeated and potentially accessible over various media (manuals, mobile apps, etc.)					
2.	<p>Simplified enrolment would ensure that beneficiaries can access the services with ease</p> <p><i>Sub-recommendation 2.1 (high):</i> The use of mobile technologies (such as mobile apps) is important for easy enrolment and claims processing. However, simultaneously, it is important for improving processes on the beneficiary end. These services must be (insofar as possible) accessible even in remote areas, and with adequate financial service providers within reach. Similarly, linkage of banks and financial services with one single code must not reduce access for beneficiaries (if they forget or are unable to access mobile banking as a result)</p> <p><i>Sub-recommendation 2.2 (high):</i> Community agents, working in the kebeles (employed at woreda level) or other community representatives can assist with the enrolment</p>	Long term	GoE	Insurance companies, Kebele and Woreda leaders, WFP	High	2024

#	Recommendation	Recommendation grouping (3 options): By type By theme Short /medium/ long-term	Responsibility (one lead office/entity) ³³	Other contributing entities (if applicable)	Priority: high/medium	By when
	process, explain insurance details, help with claims and build trust in the use of SIIPE.					
3.	<p>Customised insurance products should be used to enhance uptake through a wider variety of options and a more holistic programme approach.</p> <p><i>Sub-recommendation 3.1 (high):</i> An option for customisation might be a more flexible coverage to meet different needs and financial capacities. There could be more coverage for especially severe droughts, or other additional climactic shocks that are currently not covered. These plans may cover other types of risks, such as lower prices or worsening market situation, recurrent floods or crop failure, which hinder the ability of the current programme to help pastoralists in a holistic manner.</p> <p><i>Sub-recommendation 3.2 (high):</i> Another customisation could be the bundling of the insurance with other services (as is currently being introduced through financial services and tools such as VSLAs and ROSCAs), to allow for better forward and backward linkages. These services can increase access to veterinary services, or other actors along the value chain.</p> <p><i>Sub-recommendation 3.3 (high):</i> Consider regional inflation when determining insurance payouts so that the insurance is sufficient to cover the intended expenses</p>	Medium term	WFP	Insurance companies, banks, GoE	High	2024

#	Recommendation	Recommendation grouping options): By type By theme Short /medium/ long-term	Responsibility (one lead office/entity) ³³	Other contributing entities (if applicable)	Priority: high/medium	By when
	<p>according to regional differences.</p> <p><i>Sub-recommendation 3.4 (medium):</i> Provide training programmes on sustainable livestock management, dietary diversity and financial literacy to enhance the overall resilience and self-sufficiency of pastoralist communities and to improve capacity to use the payouts.</p> <p><i>Sub-recommendation 3.5 (medium):</i> Provide Sharia-compliant insurance that adheres to Islamic principles for improved uptake of insurance services.</p>					
4.	<p>Improve the claims process to ensure a transparent, timely, efficient and useful system for beneficiaries</p> <p><i>Sub-recommendation 4.1 (high):</i> Ensure that the claims process is efficient and transparent such that beneficiaries do not have to wait too long for their claims. Working with community members can improve efficiency ensuring faster and timely processing times and make service delivery more transparent. This could be through linkages between leaders and insurance companies to assess claims directly.</p> <p><i>Sub-recommendation 4.2 (high):</i> Linking as much of the programme as possible through a singular system (from PSNP to insurance and drought information), such that bureaucratic hurdles do not impede the delivery of claims or feedback</p>	Short term	Insurance companies	GoE (PSNP offices)	High	2024

#	Recommendation	Recommendation grouping (3 options): By type By theme Short /medium/ long-term	Responsibility (one lead office/entity) ³³	Other contributing entities (if applicable)	Priority: high/medium	By when
	<p>and complaint mechanisms at each step. is crucial. For instance one single ID across all steps will facilitate access to insurance payout, mobile banking and feedback mechanisms.</p> <p><i>Sub-recommendation 4.3 (medium):</i></p> <p>Ensure that the programme is responsive through regular feedback and coordination with community agents, kebele leaders, and through the use of monitoring and evaluation data. For instance, the use of community representatives to avoid situations where claims are being made, but satellite data might not concur on the drought situation, is a flexibility that SIIPE focal points working in communities might allow. Additional insights into the type of vegetation that might affect the satellite imagery but are not sources of animal fodder are also required to improve the reimbursement of insurance claims.</p>					
5.	<p>Strengthened partnerships between all entities working on the group would ensure an improved uptake and engagement by potential beneficiaries and increase the sustainability of the programme impact to the target groups.</p> <p><i>Sub-recommendation 5.1 (medium):</i></p> <p>There is a need to integrate insurance schemes with interventions from other humanitarian and development interventions, which will ensure a more holistic and sustained effect of the programme, aligned with the needs of the beneficiaries. The use of alternative livestock trainings, or on dietary diversification, are important for</p>	Long term	WFP	GoE, Insurance companies, banks, and NGOs working in humanitarian and development sector	Medium	2024

#	Recommendation	Recommendation grouping options): By type By theme Short /medium/ long-term	Responsibility (one lead office/entity) ³³	Other contributing entities (if applicable)	Priority: high/medium	By when
	<p>short and long terms effects to persist.</p> <p><i>Sub-recommendation 5.2 (medium):</i></p> <p>Concerning Public Private Partnership (PPP), adjustments to insurance policies and facilitative measures are necessary to foster increased private sector participation in independently providing insurance services.</p>					
6.	<p>Collecting disaggregated and consistent data on beneficiaries, outputs and outcomes, as well as associated costs for each would ensure a better cost-efficiency comparison</p> <p>The extensive programme document and review suggested that the cost and output/outcome data was not well recorded. A better regulation of the monitoring system, and the associated expenditures, can allow a cost efficiency analysis of the various programme components (such as capacity building versus payouts). Cost and beneficiary data for related programmes would also allow a more comprehensive efficiency analysis of the programme compared to existing activities. Both of these should inform future programme implementation</p>	Short term	WFP	GoE and NGOs working in the humanitarian and development sector	High	2024
7.	<p>Recruiting more female staff at woreda level would help create a more conducive space for female beneficiaries to freely share</p>	Short term	WFP	GoE and NGOs working in the humanitarian	Medium	2024

#	Recommendation	Recommendation grouping options): (3) By type By theme Short /medium/ long-term	Responsibility (one lead office/entity) ³³	Other contributing entities (if applicable)	Priority: high/medium	By when
	<p>their concerns.</p> <p><i>Sub-recommendation 7.1 (medium):</i></p> <p>Assess possible factors that might have made the job less accessible or safe for women and may therefore attract lower applications. Using gender-sensitive recruitment strategies such as ensuring that job postings are accessible and that the application process is straightforward for applicants facing logistical challenges.</p> <p><i>Sub-recommendation 7.2 (medium):</i></p> <p>Provide tailored training and capacity building programmes to equip women with the necessary skills and provide ongoing support and mentoring throughout the recruitment process to address concerns and offer guidance. It is also beneficial to consider implementing flexible working arrangements to accommodate caregiving responsibilities or other commitments of female pastoralists.</p>			and development sector		

Annexes

Annex I. Summary Terms of Reference

Evaluation of SATELLITE INDEX INSURANCE FOR PASTORALISTS IN ETHIOPIA (SIPE) PROGRAMME (2019 – 2022)

INTRODUCTION

1. This evaluation is commissioned by WFP Ethiopia Country Office and will cover the period from 2019 to 2022. It will cover key activities including provision of support to target vulnerable pastoralists and agro-pastoralists households to gain access to livestock insurance, building resilience through disaster risk reduction activities, facilitating access and capacity strengthening activities. Households targeted for support through SIPE are Productive Safety Net Programme (PSNP) beneficiaries who have five to eleven tropical livestock unit.

EVALUATION OBJECTIVES, QUESTIONS AND METHODOLOGY

2. The main objectives of the final evaluation are to contribute to accountability and learning. The *accountability* objective is based on the current assessment of SIPE performance, to help WFP present impartial evidence of actual impact to its stakeholders and partners. The *learning* objective is to determine the reasons why certain results occurred or did not occur, to draw lessons, derive good practices and provide pointers for learning. Its objectives are to: i) understand if and how the programme provides greater protection for pastoralists against drought induced risks; ii) understand whether there is any behavioural change among programme participants who received support through SIPE; and iii) measure change in well-being of households attributed to the programme.
3. The evaluation is expected to answer: a) What was the quality of the programme design including set out to meet beneficiary needs, geographic targeting and coverage of the right type of assistance? b) To what extent was the programme been implemented as planned? Has the programme achieved intended outcomes and impact. c) To what extent were resources used efficiently in terms of timeliness and cost? and d) Did the programme have an exit strategy towards a nationally owned SIPE?
4. The evaluation questions will be guided by OECD/ DAC Criteria using the program Theory of Change. The evaluation will answer the following key questions, which will be further developed and tailored by the evaluation team in a detailed evaluation matrix during the inception phase, see Table 24 below. Collectively, the questions aim at highlighting the key lessons and performance of the programme, with a view to informing future strategic and operational decisions.
5. The evaluation should analyse how gender, equity and wider inclusion objectives and GEWE mainstreaming principles were included in the intervention design, and whether the evaluation subject

has been guided by WFP and system-wide objectives on GEWE. The gender, equity and wider inclusion dimensions should be integrated into all evaluation criteria as appropriate.

Table 24. Evaluation questions and criteria

Questions for SIPE Endline Evaluation	Evaluation criteria
Key question 1: How appropriate was the programme?	
1. To what extent the programme has the right mix of approach design and assistance to achieve its goal and objectives (disaggregated by females and males?)	Relevance
2. To what extent (and how) has the SIPE strengthened the ability of pastoralists to keep their animals/livestock alive?	Relevance
Key Question 2: What are the results of the programme?	
2.1 To what extent has the program reduced livestock deaths and affected livestock off-take?	Effectiveness
2.2 Whether pay-outs have been used to achieve its primary objective to protect the livestock and for which expenses do the beneficiaries use their insurance pay-outs?	Effectiveness
2.3 What has been the impact of SIPE, through pay-outs or other mechanisms, on beneficiaries' purchases of feeds and veterinary services?	Effectiveness
Key Question 3: What factors affected the results?	
2.1 How does the SIPE model compare to other insurance initiatives and resilience initiatives without insurance? What is the value for money and are there opportunities for improvement?	Efficiency
2.2 How well the program managed to integrate the other components such as savings, access to loans, and livelihoods to establish and provide integrated risk management tools to the beneficiaries, but also enable the graduation pathways for them.	Effectiveness
Key Question 4: To what extent are the project results sustainable?	
4.1 How does the programme engage and collaborate with government stakeholders at local, district/region and national level?	Sustainability
4.2 To what extent appropriate strategies, structures, and competencies are in place for successfully promoting public and private uptake?	Sustainability
4.3 What evidence is emerging regarding the cost versus the long-term benefits of the SIPE approach compared to conventional emergency assistance in case of shocks?	Sustainability
Key Question 5: Cross Cutting	
5.1 How well the gender mainstreaming is considered in programme design and implementation and what could be improved?	Sustainability
5.2 To what extent CFM is providing sufficient feedback system for programme improvement?	Effectiveness
5.3 In what ways can SIPE be made more nutrition-sensitive to better reduce malnutrition and generate co-benefits?	Sustainability
Key Question 6: What lessons can be learned from this project so far?	
6.1 What are the best practices and what are the lessons learned, and improvements required to maximise the effectiveness and efficiency of the program?	all
6.2 To what extent SIPE's M&E and reporting system, including its framework, tools, processes and competencies at country and global level, appropriate to	all

track progress and generating timely, relevant and useful information to all relevant stakeholders?	
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- The methodology should demonstrate attention to impartiality and reduction of bias by relying on gender sensitive mixed quantitative, qualitative and participatory methods using primary and secondary data sources that are systematically triangulated (documents from different sources; a range of stakeholder groups, including beneficiaries; direct observation in different locations).

STAKEHOLDERS

- WFP internal and external stakeholders have interests in the results of this evaluation. Accountability to affected populations is tied to WFP's commitments to include beneficiaries as key stakeholders in WFP's work.

EVALUATION MANAGEMENT and QUALITY ASSURANCE

- WFP Country Office Evaluation Unit will manage this evaluation. Dawit Habtemariam (Head of Evaluation Unit) and Seblewengel Tesfaye (Evaluation Manager) will conduct second and first levels of quality assurance respectively. An internal evaluation committee is formed to help ensure the independence and impartiality of the evaluation and an Evaluation Reference Group has been set up to steer the evaluation and comment on draft evaluation deliverables.
- To be systematically applied during this evaluation, the WFP Decentralised Evaluation Quality Assurance System is based on the UNEG norms and standards and good practice of the international evaluation community and aims to ensure that the evaluation process and products conform to best practice. To enhance the quality and credibility of decentralised evaluations, an outsourced quality support (QS) service reviews the draft ToR, inception and evaluation reports, and provides a systematic assessment of their quality from an evaluation perspective, along with recommendations. The final mid-term evaluation report will be subject to an external post hoc quality assessment.

TIMELINE – KEY EVALUATION MILESTONES

Phases	Timeline	Tasks and deliverables	Responsible
1. Preparation	June – September 2023	Preparation of ToR, contracting Document review	WFP Country Office Evaluation Unit
2. Inception	October 2023	Inception mission Inception report	Evaluation firm
3. Data collection	mid-March to April 2024	Fieldwork Exit debriefing	Evaluation firm
4. Reporting	April– June 2024	Data analysis and report drafting Comments process Evaluation report	Firm
5. Dissemination and follow-up	July-August 2024	Management response Dissemination of the evaluation report	WFP Country Office Evaluation Unit

Annex II. Timeline

Months	December				January				Feb				March				April				May				June				July				August- November								
Weeks	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	A	S	O	N		
Inception Phase																																									
Desk review of key documents, Key Informant interviews																																									
Draft inception report and data collection tools (IR), including detailed evaluability assessment																																									
Revise of draft IR and data collection tools based on feedback received from DEQAS, EM, ERG, and REO.																																									
IR presentation																																									
Submit final revised IR and data collection tools																																									
Data collection phase																																									
Translation of data collection tools																																									
Questionnaire programming																																									
Field staff training and piloting																																									
Data collection																																									
Data quality checks																																									
In-country de-briefing																																									
Analysis and reporting phase																																									
Data cleaning and management																																									
Data analysis and preparation of draft evaluation report (ER)																																									
Submission of draft ER																																									
Feedback from DEQS, EM, ERG, and REO																																									
Revision and submit the revised ER																																									
ER presentation																																									
Submission of 2 pagers evaluation brief and all collected data including photos / videos																																									

Annex III. Methodology

Table 25. Logistic regression to estimate the propensity scores

Dependent variable: Participation in the programme	
Population Size	-0.00001 (0.00001)
The proportion of children aged 12 to 23 months born to large (>= 9 members) households	1.837 (2.105)
Number of buildings	-0.0001 (0.0002)
Distance from major road	-0.0002 (0.003)
Number of schools	0.624*** (0.127)
Number of water facility	0.103 (0.077)
Rain falls	0.0001 (0.0001)
Distance from major town	-0.00002* (0.00001)
Constant	-2.686*** (0.638)
Observations	299
Log Likelihood	-103.194
Akaike Inf. Crit.	224.388

Note: Standard deviations in parentheses. P-value of the corresponding t-test in parentheses. Significance stars: * $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$.

Source: C4ED Elaboration

Table 26. Summary of Balance table

Variables	Summary of Balance for All Data			Summary of Balance for Matched Data				
	Means Treated	Means Comparison	Std. Diff.	Mean	Means Treated	Means comparison	Std. Diff.	Mean
Distance from major road	0.35	0.13	1.04		0.35	0.31	0.18	
Population Size	5464.09	2489.54	0.67		5464.09	5354.78	0.02	

The proportion of children aged 12 to 23 months born to large (>= 9 members) households	0.28	0.25	0.23	0.28	0.28	0.02
Number of buildings	1435.58	791.58	0.52	1435.58	1455.80	-0.02
Distance from major road	87.14	85.17	0.04	87.14	90.69	-0.07
Number of schools	2.86	0.86	1.21	2.86	2.59	0.16
Number of water facility	2.86	0.76	0.55	2.86	2.35	0.13
Distance from major town	34243.65	35156.57	-0.04	34243.65	31123.18	0.13
Rain falls	1759.38	879.47	0.39	1759.38	1857.49	-0.04

Note: The sample size for the matched dataset is 49 for both comparison and treated while the unmatched sample from the comparison group is 201.

Source: C4ED Elaboration

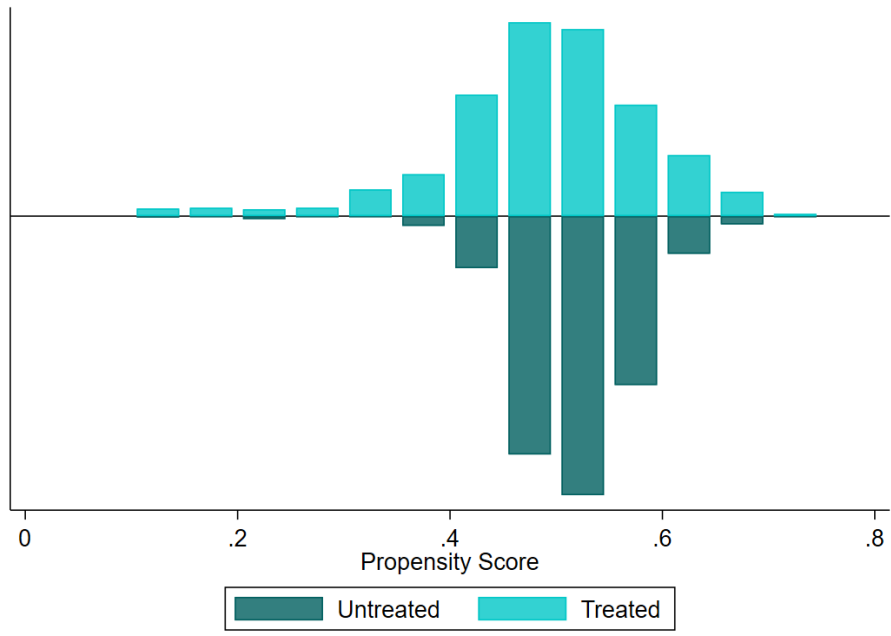
Table 27. Additional power calculations for various Kebele numbers and observations

Outcome	Comparison Mean	SD	ICC	Total sample	Obs. cluster	per	Number clusters	of	MDES	Required treated Mean	Required change	%
With 98 Kebeles (assuming 22 observations per cluster)												
Income from livestock sales (ETB)	1,814.35	2,608.23	0.05	2,156	22		98		381.71	2,196.06	1.46	
Income share from PSNP transfer	0.22	0.34	0.14	2,156	22		98		0.06	0.29	2.38	
Number of coping strategies (out of 18)	5.61	4.38	0.08	2,156	22		98		0.72	6.33	1.83	
No. of shocks (out of 21)	3.95	2.71	0.11	2,156	22		98		0.48	4.42	2.13	
Total value of owned assets	1,498.84	4,253.38	0.08	2,156	22		98		687.25	2,186.09	1.77	
Total livestock expenditure	0.28	5.22	0.01	2,156	22		98		0.66	0.93	1.07	
TLU Info from WFP using weight=0.1 for shoats	7.78	1.83	0.12	2,156	22		98		0.33	8.11	2.16	
With 80 Kebeles (assuming 26 observations per cluster)												
Income from livestock sales (ETB)	1,814.35	2,608.23	0.05	2,080	26		80		401.07	2,215.41	1.55	
Income share from PSNP transfer	0.22	0.34	0.14	2,080	26		80		0.07	0.29	2.66	
Number of coping strategies (out of 18)	5.61	4.38	0.08	2,080	26		80		0.77	6.38	1.99	

No. of shocks (out of 21)	3.95	2.71	0.11	2,080	26	80	0.51	4.46	2.36
Total value of owned assets	1,498.84	4,253.38	0.08	2,080	26	80	730.44	2,229.28	1.93
Total livestock expenditure	0.28	5.22	0.01	2,080	26	80	0.67	0.95	1.08
TLU Info from WFP using weight=0.1 for shoats	7.78	1.83	0.12	2,080	26	80	0.35	8.13	2.39
With 98 Kebeles (assuming 12 observations per cluster- sub-sample)									
Income from livestock sales (ETB)	1,814.35	2,608.23	0.05	1,176	12	98	474.66	2,289.01	1.23
Income share from PSNP transfer	0.22	0.34	0.14	1,176	12	98	0.07	0.3	1.69
Number of coping strategies (out of 18)	5.61	4.38	0.08	1,176	12	98	0.86	6.47	1.41
No. of shocks (out of 21)	3.95	2.71	0.11	1,176	12	98	0.56	4.5	1.57
Total value of owned assets	1,498.84	4,253.38	0.08	1,176	12	98	822.76	2,321.60	1.39
Total livestock expenditure	0.28	5.22	0.01	1,176	12	98	0.87	1.15	1.04
TLU Info from WFP using weight=0.1 for shoats	7.78	1.83	0.12	1,176	12	98	0.38	8.16	1.58

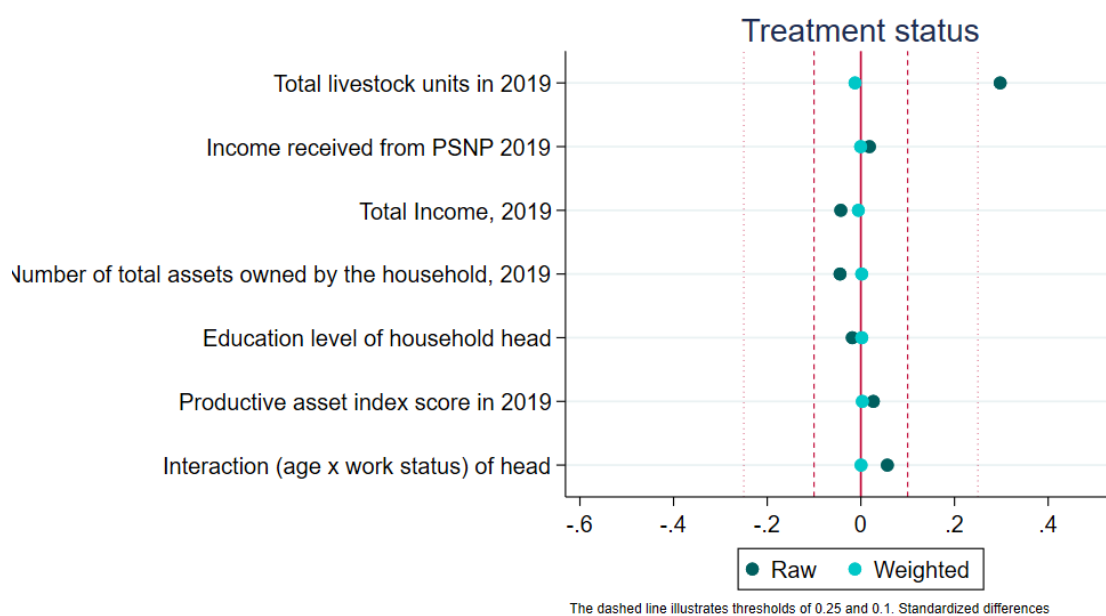
Source: C4ED Elaboration

Figure 14. Propensity score distribution between comparison (untreated) and treated groups



Source: Own elaboration based on endline household survey

Figure 15. Reduction in bias post matching



Source: Own elaboration based on endline household survey

Table 28. Household characteristics for the total sample

	(1) Full sample	(2) Treatment	(3) Comparison	(4) Difference
Gender of the household head	66.7 (47.2)	66.8 (47.1)	66.5 (47.2)	0.2
Age of the household head	45.2 (13.3)	45.9 (13.8)	44.4 (12.7)	1.5***
Marital status of the household head	88.8 (31.5)	87.8 (32.7)	89.8 (30.2)	-2.0
Household head is working	85.5 (35.2)	86.0 (34.8)	85.0 (35.7)	0.9
Occupation of head: Livestock herding/production	61.8 (48.6)	63.8 (48.1)	59.8 (49.1)	4.0*
Occupation of head: Crop farming/sale of crops	33.2 (47.1)	28.9 (45.3)	37.5 (48.4)	-8.6***
Occupation of head: Salaried employment	1.1 (10.3)	0.6 (7.5)	1.6 (12.5)	-1.0**
Occupation of head: Casual labour	3.5 (18.4)	3.2 (17.5)	3.9 (19.3)	-0.7

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Occupation of head: Business and petty trading	3.0 (17.0)	2.8 (16.5)	3.2 (17.6)	-0.4
Occupation of head: Unpaid work in family shop/business	0.7 (8.3)	0.6 (7.5)	0.8 (9.2)	-0.3
Occupation of head: House/domestic work	15.0 (35.7)	16.9 (37.5)	13.1 (33.7)	3.9**
Occupation of head: Looking or a job/unemployed	0.6 (7.8)	0.4 (6.1)	0.8 (9.2)	-0.5
Occupation of head: Not working	13.7 (34.3)	13.1 (33.8)	14.2 (34.9)	-1.1
Occupation of head: Cannot work (age, sickness, etc.)	1.9 (13.7)	2.0 (14.2)	1.8 (13.2)	0.3
Occupation of head: Other	0.5 (6.8)	0.6 (7.5)	0.4 (6.1)	0.2
Household size	6.5 (2.4)	6.3 (2.4)	6.7 (2.3)	-0.4***
Number of children under 18 in household	4.0 (2.2)	3.8 (2.2)	4.2 (2.2)	-0.4***
Number of children (<18 year) that work in household	1.1 (1.5)	1.0 (1.5)	1.2 (1.6)	-0.2**
Number of adults above 60 in household	0.2 (0.5)	0.3 (0.5)	0.2 (0.5)	0.1***
Number of female household members	3.0 (1.5)	3.0 (1.6)	3.1 (1.5)	-0.2**
Share of females in household	47.1 (18.5)	47.3 (19.3)	46.9 (17.6)	0.4
Number of households members under 5	1.1 (1.2)	1.0 (1.1)	1.2 (1.2)	-0.2***
Total number of occupations by all household members	4.1 (3.1)	4.0 (3.0)	4.2 (3.2)	-0.2
Number of working household members	3.1 (2.0)	3.1 (1.9)	3.2 (2.1)	-0.1
Share of working household members	50.3 (28.9)	51.7 (29.0)	49.0 (28.7)	2.7**
Number of observations	2,142	1,075	1,067	

Annex IV. Evaluation matrix

Indicators highlighted in yellow are those that were only partially covered, or not at all.

EQ NO.	EQ	SUB-EQ NO.	SUB-EQ	INDICATORS	DATA COLLECTION METHOD	SOURCES OF DATA/INFORMATION	DATA ANALYSIS METHODS/ TRIANGULATION
RELEVANCE							
1	How appropriate was the programme?	1.1	To what extent the programme has the right mix of approach design and assistance to achieve its goal and objectives (disaggregated by females and males)?	· Percentage of beneficiaries (disaggregated by sex) who report satisfaction with the programme's approach design	Household Survey	Beneficiaries	Descriptive statistics, cross-tabulation
		1.2	To what extent have relevant national, regional, local level stakeholders been actively involved in the design and programming of the SIPE programme?	· Extent of accessibility and participation for different stakeholders during situation/needs analysis and programme planning and programme responsiveness	Key informant interview and desk review	WFP Ethiopia country office	Qualitative content analysis
						BoARND	document review
						Inception report, progress report, programme document	
EFFECTIVENESS							
2	To what extent has the SIPE programme achieved its intended objectives and	2.1	To what extent did SIPE increase livestock insurance coverage of pastoralists	· Number of new pastoralists enrolled in SIPE insurance coverage	Desk Review	M&E data	Descriptive statistics (Comparison between achieved and goal)

	what were the main factors that facilitated or constrained achievement of results?			· Number of farmers reporting timely receiving of insurance payouts	Desk review	M&E data	Descriptive statistics (Comparison between achieved and goal)
		2.2	To what extent did the SIPE increase community assets?	· Number of community assets developed through SIPE - barriers, drivers and lessons learnt for increasing community assets	Desk Review	M&E data	Descriptive statistics (Comparison between achieved and goal)
					Key informant interview	WFP Ethiopia country office	Qualitative content analysis
					Focus Group Discussion, in-depth interview	beneficiaries	
		2.3	What are the factors that facilitated or constrained the achievement of SIPE outcomes and goal?	· Identified challenges and constraints	Key informant interview,	WFP Ethiopia country office, BoARND, BoLPD, insurance companies, development group leaders,	Qualitative content analysis
					Focus Group Discussion, in-depth interview	beneficiaries	Document review
					Desk review	Inception report, progress report, programme document	
EFFICIENCY							
3	To what extent have resources	3.1	What is the value for money and are there opportunities for improvement?	· Unit cost per beneficiary who gained access to insurance	Desk Review	Programme Documents (Proposal, Logframe,	VfM

	been allocated and utilised in an efficient manner in the delivery of SIPE objectives?	3.2	How does the SIPE model compare to other insurance initiatives and resilience initiatives without insurance?	· Unit cost of the intervention compared to alternative options	Cost-effectiveness analysis	Annual Reports; Monitoring Reports).	Cost-effectiveness analysis
4	To which extent (and how) has SIPE affected productive decisions and livelihoods of beneficiary households?	4.1.	What has been the impact of SIPE on benefiting pastoralists' investments in livestock and other productive assets?	· Total livestock related expenditure	Household survey	Beneficiaries	Descriptive statistics (cross tabulation) and Matching,
				· Expenditure on livestock	Household survey		
				· Expenditure on forage or fodder	Household survey		
				· Expenditure on water, veterinary services/medicine, other, etc.	Household survey		
				Qual			
				· Reasons for (type of) investment and challenges	Focus Group Discussion, in-depth interview		
		4.2	To which extent have pastoralists obtained better access to socio-economic assets and infrastructure that enhance their livelihoods?	· Asset ownership	Household survey	Beneficiaries	Descriptive statistics (cross tabulation) and Matching,
				· Asset index	Household survey		
				Qual			
				· <i>Involvement in public work activity, perceived benefit from public work activities *</i>	Focus Group Discussion, in-depth interview		
		4.3	What has been the effect of SIPE on distress sales of productive and consumption assets?	· Distress sales of livestock	Household survey	Beneficiaries	Descriptive statistics (cross tabulation) and Matching,
				· Coping strategies against negative	Household		

			shocks	survey		
			Qual			
			· Preference and application of coping strategies against negative shocks utilised	Focus Group Discussion, in-depth interview		Qualitative content analysis
	4.4	How has SIPE changed beneficiary households' (and their individual members') engagement in alternative livelihood and income sources?	· Income diversification (number of income/ livelihood sources)	Household survey	Beneficiaries	Descriptive statistics (cross tabulation) and Matching,
			· Value/amount of income received from various activities	Household survey		
			Qual			
			· Effects of SIPE on alternative livelihood and income sources? - barriers for livelihood and income diversification	Focus Group Discussion, in-depth interview		Qualitative content analysis
	4.5	Has SIPE ultimately led to more stable household incomes among its beneficiaries?	· Composition of income sources	Household survey	Beneficiaries	Descriptive statistics (cross tabulation) and Matching,
			· Income share from 'stable' sources	Household survey		
			· Reported time periods of no-income	Household survey		
			Qual			
			- Effect SIPE on income stability	Focus Group Discussion, in-depth interview	Qualitative content analysis	
	4.6	To which extent have disadvantaged and vulnerable members of pastoralist families	· Share of children enrolled in school absent from school, dropouts	Household survey	Beneficiaries	Descriptive statistics (cross

			benefitted from improved income and protection within their households?	<ul style="list-style-type: none"> · Share of children working 	Household survey		tabulation) and Matching,
				<ul style="list-style-type: none"> · Share of children in early marriage 	Household survey		
				<ul style="list-style-type: none"> · Nutritional status of children under 5 years 	Household survey		
				<ul style="list-style-type: none"> - effect of increased income stability on family members' wellbeing and protection* - barriers for effects not materialising* 	Focus Group Discussion, in-depth interview		
5	Have programme activities and services led to improved awareness, understanding or use of insurance and financial tools and products?	5.1	How well do pastoralists understand SIPE as an insurance product, and how does training and capacity building under the programme contribute to this awareness?	<ul style="list-style-type: none"> · General insurance knowledge index 	Household survey	Beneficiaries	Descriptive statistics (cross tabulation) and Matching,
				<ul style="list-style-type: none"> · SIPE-specific knowledge index 	Household survey		
				Qual			
				<ul style="list-style-type: none"> · Understanding of general insurance and livestock insurance in particular 	Focus Group Discussion, in-depth interview		Qualitative content analysis
				<ul style="list-style-type: none"> · Availability of, access to and utilization of awareness building measures 	Focus Group Discussion, in-depth interview		
		<ul style="list-style-type: none"> · Design and execution of capacity building measures 	Focus Group Discussion, in-depth interview				
		5.2	To which extent are pastoralists willing to pay for the partially subsidised insurance coverage and for livestock insurance in general?	<ul style="list-style-type: none"> · Willingness to pay for livestock insurance estimates (per animal category and per TLU) 	Household survey	Beneficiaries	Descriptive statistics (cross tabulation) and Matching,

			Preferred financing option for livestock insurance	Household survey	Beneficiaries	Descriptive statistics (cross tabulation) and Matching,	
			Qual				
			· <i>General willingness to pay*</i>	Focus Group Discussion, in-depth interview		Qualitative content analysis	
			· <i>Reasons for willingness to pay*</i>	Focus Group Discussion, in-depth interview			
		5.3	How has SIPE affected financial coping mechanisms of households in periods of distress?	· Number of households having access and use of financial services: mobile banking, bank accounts	Household survey	Beneficiaries	Descriptive statistics (cross tabulation) and Matching,
			Qual				
			· Utilization and effectiveness of SIPE insurance schemes as coping mechanism	Focus Group Discussion, in-depth interview			Qualitative content analysis
		5.4	To which extent have beneficiary households improved and diversified their access to - and actual use - of financial services (e.g. microcredit)?	· Number of financial services used by households: mobile banking, bank accounts	Household survey	Beneficiaries	Descriptive statistics (cross tabulation) and Matching,
			Qual				
			- reasons for utilization / non-utilization of financial services	Focus Group Discussion, in-depth interview			Qualitative content analysis
			· <i>Use of mobile banking account before and after SIPE *</i>	Focus Group Discussion, in-depth interview			

6	To which extent (and how) has SIIPE strengthened the ability of pastoralists to keep their animals alive?	6.1	For which household expenses do beneficiaries use the insurance pay-outs?	· Share of payout used/planned to be used for specific household/livestock related needs	Household survey	Beneficiaries	Descriptive statistics (cross tabulation) and Matching,
		6.2	What has been the impact of SIIPE, through payouts or other mechanisms, on beneficiaries' purchases of feeds and veterinary services?	· Share of payout used/planned to be used for livestock related activities	Household survey	Beneficiaries	
		6.3	To which extent has the programme reduced livestock deaths and affected livestock offtake?	· Total number and value of livestock deaths and offtakes	Household survey	Beneficiaries	
		6.4	How have insurance payouts under SIIPE affected pastoralists' livestock sales?	· Total number and value of livestock sales	Household survey	Beneficiaries	
7	Has the food security of pastoralists and their families improved because of the programme?	7.1	What is the effect of SIIPE on the likelihood that members of beneficiary households (especially women and children) have insufficient meals per day?	· Household food insecurity access score	Household survey	Beneficiaries	Descriptive statistics (cross tabulation) and Matching,
				· Household frequency of insufficient meals	Household survey		
				· Nutritional status of children under 5 years	Household survey		
				· Food consumption Score (FCS)	Household survey		
		7.2	How have households diversified their diets due to their involvement in SIIPE?	· Household dietary diversity score	Household survey	Beneficiaries	Descriptive statistics (cross tabulation) and Matching,
7.3	To which extent have SIIPE households changed their level or composition of food expenditure?	· Household food consumption expenditure share of total expenditure and composition	Household survey	Beneficiaries	Descriptive statistics (cross tabulation) and Matching,		
SUSTAINABILITY							
8	To what extent are the project results	8.1	How well does the programme engage and collaborate with government stakeholders at local, district/region and national level?	· Number of SIIPE activities aligned with regional bureaux' (BoANRD and BoLPD) annual work plans	Desk review	Inception report, progress report, programme document	Descriptive statistics

	sustainable?		<ul style="list-style-type: none"> · Barriers hindering collaboration and lessons learnt · drivers supporting collaboration and lessons learnt 	Key informant interview	WFP country office, insurance providers	Qualitative content analysis
				Key informant interview	BoARND	
				Key informant interview	BoLPD	
	8.2	To what extent are appropriate strategies, structures, and competencies in place for successfully promoting public and private uptake?	<ul style="list-style-type: none"> · Number of partnerships formed and maintained for delivery of insurance product and services - drivers and barriers for successful partnerships 	Desk review	Inception report, progress report, programme document	Descriptive statistics
				Key informant interview	WFP country office	Qualitative content analysis
				Key informant interview	BoARND, BoLPD	
				Key informant interview	insurance providers	
			<ul style="list-style-type: none"> · Number of PPPs developed to promote livestock insurance - - drivers and barriers for successful PPP 	Desk review	Inception report, progress report, programme document	Descriptive statistics
				Key informant interview	WFP country office	Qualitative content analysis
				Key informant interview	BoARND, BoLPD	
	8.3	What evidence is emerging regarding the cost versus the long-term benefits of the SIPE approach compared to conventional emergency assistance in case of shocks?	<ul style="list-style-type: none"> · Cost versus the long-term benefits SIPE - Costs versus the long-term benefits conventional emergency assistance 	Desk review	Inception report, progress report, programme document, other literature	Descriptive statistics
				Key informant interview	WFP country office	Qualitative content analysis

					Key informant interview	BoARND	
					Key informant interview	BoLPD	
						-	
		8.4	How well is gender mainstreaming considered in programme design and implementation and what could be improved?	<ul style="list-style-type: none"> Extent of gender-sensitivity of programme design extent of gender sensitivity in programme implementation and reporting reported gender-specific barriers and programme responsiveness reported differentiated outcomes 	Desk review	Inception report, progress report, programme document	Descriptive statistics
					Key informant interview	WFP country office, BoARND, BoLPD, insurance providers	Qualitative content analysis
					Focus Group Discussion, in-depth interview	Beneficiaries	
		8.5	In what ways can SIPE be made more nutrition-sensitive in order to better reduce malnutrition and generate co-benefits?	<ul style="list-style-type: none"> reported reasons for malnutrition and programme responsiveness Extent to which programme design mainstreams malnutrition and recommendations for improvements alignment and cooperation with other stakeholders/programmes combatting malnutrition reported successes and gaps in achieving convergent programming by different stakeholders/programmes 	Desk review	Inception report, progress report, programme document	Descriptive statistics
					Key informant interview	WFP country office, BoARND, BoLPD	Qualitative content analysis
					Focus Group Discussion, in-depth interview	beneficiaries	Qualitative content analysis
KEY LESSONS							
9	What lessons can be learned from this project so far?	9.1	What are the best practices and what are the lessons learnt, and improvements required to maximise the effectiveness	<ul style="list-style-type: none"> [cross cutting question throughout other qualitative EQs] Identified best practices, lessons 	Desk review	Inception report, progress report, programme document	Descriptive statistics

			and efficiency of the programme?	learnt, and recommended improvements for the programme.	Key informant interview	WFP country office, BoARND, BoLPD, insurance providers	Qualitative content analysis
					Focus Group Discussion, in-depth interview	Beneficiaries	
		9.2	To what extent SIPE's M&E and reporting system, including its framework, tools, processes and competencies at country and global level, appropriate to track progress and generating timely, relevant and useful information to all relevant stakeholders?	- strengths and weaknesses of M&E framework - quality of processes, tools and competencies as perceived by key informants - Identified best practices, lessons learnt, and recommended improvements for the programme.	Desk review	Inception report, progress report, programme document	Descriptive statistics
					Key informant interview	WFP country office	Qualitative content analysis
					Key informant interview	BoARND, BoLPD	
					Key informant interview	insurance providers	
CROSS CUTTING							
10	To what extent did the programme consider capacity strengthening, accountability to affected populations, protection, and the triple nexus?	10.1	What were the capacity needs and gaps identified by the programme stakeholders at the beginning of the programme?	List of identified capacity needs and gaps	Desk Review	Inception report, progress report, programme document	Descriptive statistics
					Key informant interviews	WFP country office	Qualitative content analysis
		10.2	What capacity-strengthening activities or strategies were implemented by the programme to address those needs and gaps?	Number and type of capacity-strengthening activities or strategies implemented by the programme	Desk Review	Inception report, progress report, programme document	Descriptive statistics
					Key informant interviews	WFP country office	Qualitative content analysis

		10.3	To what extent is WFP's complaint and feedback mechanism (CFM) providing a sufficient feedback system for programme improvement?	<ul style="list-style-type: none"> • Evidence of changes or improvements in the programme's design and implementation based on the feedback and complaints from the affected populations • Allocation of dedicated staff and resources to manage the CFM • accessibility of feedback/complaint channels and level of sophistication of feedback/complaint management structure • Content of feedback and programme responsiveness • extent of awareness and utilization of CFM among beneficiaries • Number of complaints and feedback received that have resulted in programme changes • availability and quality of feedback and complaint mechanism documents (FCM structure, forms and guidance, reports) 	Desk Review	Inception report, progress report, programme document	Descriptive statistics
					Key informant interviews	WFP country office	Document Review
					FGDs, IDIs	BOARND, Beneficiaries	Qualitative content analysis
		10.4	How did the programme ensure that its activities did not cause or exacerbate any protection risks or harm to the affected populations?	Existence and implementation of protection policies within the programme	Desk Review	Inception report, progress report, programme document	Descriptive statistics
					Key informant interviews	WFP country office	Qualitative content analysis
				Number and type of protection risks identified and mitigated by the programme	Desk Review	Inception report, progress report, programme document	Descriptive statistics
Key informant interviews	WFP country office				Qualitative content analysis		

			Awareness and understanding of protection risks among programme staff	Key informant interviews	WFP country office	Qualitative content analysis	
		10.5	How did the programme collaborate with other HDP actors to address the drivers of the crisis and promote sustainable solutions?	List of collaboration mechanisms established by the programme with other HDP actors	Desk Review	Inception report, progress report, programme document	Descriptive statistics
					Key informant interviews	WFP country office	Qualitative content analysis
			Level of coherence of the programme's activities with the priorities of the HDP actors		Desk Review	Inception report, progress report, programme document	Descriptive statistics
					Key informant interviews	WFP country office	Qualitative content analysis
						BoARND, BoLPD	Qualitative content analysis

Annex V. Data collection tools

Household Survey



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dated%20version.doc

Focus Group Discussion tool

Date	Location	Interviewer

Introductory Statement

Good morning/afternoon/evening. My name is _____. I am part of a research team from C4ED, a German research centre, that is conducting a study on the living standards of Pastoralists in Somali region.

We have visited your household to ask you some questions about your livestock and your household welfare and activities. Now we would like you to engage in this Focus Group Discussion, to get some more detailed insights and hear about your opinions on selected topics.

Throughout the discussion, please do not hesitate to speak up. You are free to share any additional information with us that was not directly covered by our questions. We are interested in your candid opinions. There are no right or wrong answers.

The participation in the discussion is completely voluntary. You can refuse to answer any of the questions that you do not want to answer, or you can stop to discuss any question at any time. Your comments and the information collected will be kept strictly confidential. Your name and any other identifying information will be accessible only to the researchers and will never appear in any sort of report.

If you have any questions at any time, please feel free to stop me and ask. Thank you very much for agreeing to participate in today's Focus Group Discussion.

I will lead the discussion. First and foremost, I am here to hear from you, so I will do my best to ensure a smooth and nice atmosphere to discuss.

Informed Consent

With your permission I/we would like to audio record the discussion. This way, I/we can free myself/ourselves from taking notes and can listen to the discussion again later. The audio recording will solely be used for research purposes and will be treated with strict confidentiality. [Audio recording will be abandoned if participants object.]

I/we will circulate a copy of the informed consent and read it out to you. This will explain the purpose of the study and your participation in this discussion. If you agree to participate, I/we will ask you to sign the form or to put your fingerprint on it. I/we will then move on to the discussion.

Do you have any questions before we start?

Lastly, I want to share with you that we shall respect each other and listen to one another. When someone is speaking, we shall listen to that person attentively until he/she finishes.

Thank you very much for your participation. Please feel free to ask any questions you may have about the study.

- If you have questions that you would like to discuss after the session, including how your data will be used, you can contact:

Ms. Nolawit Teshome.

Tel. 0949180842 / nolawit.teshome@c4ed.org

Qualitative Research Manager at the Center for Evaluation and Development (C4ED)

- If you wish to raise any concerns about the discussion or the researcher(s) who took part in it, you can do directly via this e-mail address: complaints@c4ed.org

I/we will circulate a list where you can sign in yourself.

[Please start the recording. Have a round of introduction (each participant says their name) to record the names on the tape.]

	Name of Participant	Gender (F/M)	Age	Village/Kebele	Signature/Thumb imprint
1					
2					
3					
4					
5					
6					
7					
8					

Draft interview guide

EQs	
	<ul style="list-style-type: none"> Before we begin, could you please introduce yourselves? Why did you decide to enrol in the SIIPE programme what was your involvement with SIIPE programme?
5.1.	<ul style="list-style-type: none"> Please tell me what you know about the SIIPE insurance services. <ul style="list-style-type: none"> What is SIIPE and how does it work? How did you learn about SIIPE? From where did you learn about this? Did you participate in training and awareness raising activities around SIIPE? If so, please tell me about these activities. <ul style="list-style-type: none"> How often were the trainings held? Where? Who facilitated the trainings? What do you know now that you did not know before? Is there something you still do not understand? Is there something you would like to have more information on
2.3.	<ul style="list-style-type: none"> In your opinion, were there any challenges that made the SIIPE programme less beneficial to you? <ul style="list-style-type: none"> Did you (or people you know) face any challenges specific to the registration for insurance or mobile banking? Which ones? Did you (or people you know) face any challenges specific to the utilization of insurance or mobile banking?

	<ul style="list-style-type: none"> ○ Did you (or people you know) face any challenges specific to the public work programme? ○ Were there some promises or expectations that were not fulfilled? ○ Were there any barriers or challenges that prevented you from fully profiting from the programme?
4.1	<ul style="list-style-type: none"> • As a farmer, you may at times have to spend money on livestock, fodder, veterinary services, water. Since you participated in the SIIPE, did your investments/expenditures in livestock or productive assets change? e.g. did you buy livestock, fodder, veterinary services, water? • If yes: <ul style="list-style-type: none"> ○ What exactly did you buy, when and how? ○ What challenges (if any) did you face when attempting to make this investment? ○ What was the reason/motivation for the investment? ○ Did the project/insurance payment contribute to this purchase? How so? • If no: <ul style="list-style-type: none"> ○ Why did you not make any investments? ○ What kind of change would you need, to be able to invest?
4.2.	<ul style="list-style-type: none"> • Did you or any of your household members participate in any Public Works activities in the past year? • If yes: <ul style="list-style-type: none"> ○ Can you describe the process? ○ In which kind of activities did you participate? What did you do? ○ What was the reason you participated? PNSP vs. SIIPE? [did you do different tasks for different programmes?] ○ In which way (if any) did you benefit from participating in these public work activities? • If no: <ul style="list-style-type: none"> • Why did you not participate? (e.g., No obligation? No information where/how to participate?)
2.2	<ul style="list-style-type: none"> • The public work activities were meant to increase community assets. Did these activities increase shared assets of the community, if yes which ones? (e.g. public irrigation system) • If yes, did you utilise the shared community assets? If yes, how? If not, why not? Please tell me more
4.3, 5.3	<ul style="list-style-type: none"> • In the past year, what challenges did your community face? Which of these challenges also affected your household? For example: <ul style="list-style-type: none"> ○ Drought? ○ Flooding? ○ Food insecurity/Lack of food? ○ Land disputes?

	<ul style="list-style-type: none"> ○ Other resource-based/ethnic/clan tensions or conflicts? ○ Any other challenges? ○ When and how did these challenges last affect you and your household? <p>[Note: please ask for the challenges mentioned above; if mentioned, especially drought and lack of food, conflict]</p> <ul style="list-style-type: none"> ● How did you deal with those challenges? (e.g. sell livestock, marry children, change food/eating habits, migrate to other places, borrow money, rely on traditional assistance (Irmaansi, Gadiid Celis, Xoo)? ● What difference did SIPE make in how you cope/react to the distress? <ul style="list-style-type: none"> ○ Did you do anything differently, now that you are a beneficiary of SIPE? If yes, what? If not, why not? ○ Did you utilise the SIPE insurance or community assets? If yes, how, if not, why not? ● How much could you recover from that shock/challenge? <ul style="list-style-type: none"> ○ Would you do anything differently if you faced the same challenge again? ○ What was/is the best coping mechanism, in your experience? ○ How would you react in the future?
4.4, 4.5	<ul style="list-style-type: none"> ● Before you joined SIPE, what was your/your household's main income source? ● Since you joined SIPE did you change your main income source, if yes in which way? ● Since you joined SIPE did you diversify your income sources / did you add other sources of income to your main source? If yes, how, if not, why not? <ul style="list-style-type: none"> ○ What are the reasons? ○ Would you like to engage in other options? Which ones? ○ What are the obstacles to having an additional income source? ● What are the obstacles to having an additional income source? ● Since you joined SIPE, was your income more stable, less stable or the same? Why? ● Since you joined SIPE, did your income increase, decrease or remain the same? Why? ● In what way (if any) did your participation in SIPE affect your income? <ul style="list-style-type: none"> ○ HAS SIPE contributed to an increase in your (monthly or yearly) income? If yes, how so? If not, why not? ○ Has SIPE contributed to the income stability of your household? If yes, how so? If not, why not? ○ Has SIPE made any contribution to you/your household's engagement in alternative income generation? If yes, how so? If not, why not? ○ What alternative income/livelihood source did you engage in as a result of SIPE? ● In your perception, what can you do to make sure you always generate enough income?
4.6	<ul style="list-style-type: none"> ● (If applicable) How have you and your family benefited from the improved income and protection (as a result of SIPE)? <ul style="list-style-type: none"> ○ In what way (if any) are there any changes in your children's access to and retention in schools?

	<ul style="list-style-type: none"> ○ In what way (if any) are there any changes in your children's engagement in work? ○ In what way (if any) are there any changes in your decision to send your children off for (early) marriage? ○ In what way (if any) are there any changes in affording to provide a variety of food for your children and or other family members? ○ In what way (if any) are there any changes in affording healthcare to individual family members? ○ In which way (if any) did the situation of women and girls in your household improve? ○ In what way (if any) are there any other benefits/changes?
5.2.	<ul style="list-style-type: none"> ● If you have to, are you willing to pay for the partially subsidised insurance coverage and for livestock insurance in general? <ul style="list-style-type: none"> ○ If yes, why? If not, why not? ○ How much are you willing to pay? ○ What would the timing of payment be like? (How often)
5.4.	<ul style="list-style-type: none"> ● Do you have access to a mobile bank account? Do you use this account? if yes: <ul style="list-style-type: none"> ○ Who is the provider? ○ Since when do you have it (year, month)? ○ What are the reasons you opened it up? If no: <ul style="list-style-type: none"> ○ Why don't you have a mobile bank account? ○ Do you know anybody who uses mobile banking? ○ What are the alternatives to a mobile bank account? Formal bank account, no account? ● Since joining SIPE, do you use financial services more often? Please explain. <ul style="list-style-type: none"> ○ What are these financial services? ○ Do you use mobile banking more? Why? ○ Do you use the service of more than one provider? Which ones? Why did you decide to diversify?
8.4.	<ul style="list-style-type: none"> ● Do you think men and women can equally benefit from the SIPE? What are some challenges that make it harder for one group? How? <p>For women only:</p> <ul style="list-style-type: none"> ● As a woman, did you have more difficulties accessing the services of SIPE? (e.g. lack of awareness, lack of family support, lack of financial decision-making power, lack of mobility, etc.)? If yes, which ones? ● Is there anything the programme could do better to make it easier for you to profit from its services?
8.5 9.1.	<ul style="list-style-type: none"> ● Did you or any of your family members recently suffer from a lack of food or poor quality of food, or an unbalanced diet? If yes, what are the reasons? Is it different for different family members?

	<ul style="list-style-type: none"> ○ In which way could you be supported to get better access to healthy food? • What, if anything, was the biggest benefit you got from the SIPE programme? <ul style="list-style-type: none"> ○ Can you give me examples of how this project has helped you? • Is there anything the SIPE programme can do differently to better support you? <ul style="list-style-type: none"> ○ What are the things, if any, that you suggest being improved?
10.3	<ul style="list-style-type: none"> • Did you ever have any complaints about the programme? If yes which ones, if not, why not? • Did the programme staff request feedback from you about the programme? If so, did you give it? • If you had complaints or suggestions, were there ways for you to communicate them to the programme staff? (e.g. talking to them, using complaint boxes or hotlines) • Did your or other beneficiaries' complaints result in any change? If so, please tell me more about what changed. If not, why do you think was the reason?
End	<ul style="list-style-type: none"> • We reached the end of the interview. Is there anything else you would like to add?

Key Informant Interview tool

Date	Location	Interviewer

Introductory Statement

Good morning/afternoon/evening. My name is _____. I am part of a research team from C4ED, a German research centre, that is conducting a study on SIPE (WFP).

The purpose of this interview is to get more insights into the implementation of SIPE.

Throughout the interview, please do not hesitate to speak up. You are free to share any additional information with me that was not directly covered by the questions. I am interested in your candid opinions. There are no right or wrong answers.

The participation in the interview is completely voluntary. You can refuse to answer any of the questions that you do not want to answer, or you can stop to discuss any question at any time. Your comments and the information collected will be kept strictly confidential. Your name and any other identifying information will be accessible only to the researchers and will never appear in any sort of report.

If you have any questions at any time, please feel free to stop me and ask. Thank you very much for agreeing to participate in today's Interview.

Informed Consent

With your permission I would like to audio record the interview. This way, I can free me from taking notes and can listen to the interview again later. The audio recording will solely be used for research purposes and will be treated with strict confidentiality. [Audio recording will be abandoned if participants object.]

Do you have any questions before we start?

Name of Key Informant	Role/position	Contact Details	Signature

Thank you very much for your participation. Please feel free to ask any questions you may have about the study.

- If you have questions that you would like to discuss after the session, including how your data will be used, you can contact:

Ms. Nolawit Teshome.

Tel. 0949180842 / nolawit.teshome@c4ed.org

Qualitative Research Manager at the Center for Evaluation and Development (C4ED)

- If you wish to raise any concerns about the discussion or the researcher(s) who took part in it, you can do so directly via this e-mail address: complaints@c4ed.org

Instructions:

The following guide provides a comprehensive list of questions for two types of beneficiaries (high performers and low performers). Before and during the interview, please choose the relevant questions that fit the situation of the beneficiary and ignore questions that are irrelevant.

Draft interview guide

EQs	
	<ul style="list-style-type: none"> • Before we begin, could you please introduce yourself? Why did you decide to enrol in the SIPE programme? • What was your involvement with the SIPE programme? • For dropouts only: why did you drop out of the programme?
5.1.	<ul style="list-style-type: none"> • Please tell me what you know about the SIPE insurance services. <ul style="list-style-type: none"> ○ What is SIPE and how does it work? ○ How did you learn about SIPE? From where did you learn about this? • Did you participate in training and awareness raising activities around SIPE? If so, please tell me about these activities. <ul style="list-style-type: none"> ○ What do you know now that you did not know before? ○ Is there something you still do not understand? Is there something you would like to have more information on?
2.3.	<ul style="list-style-type: none"> • In your opinion, were there any challenges that made the SIPE programme less beneficial to you? <ul style="list-style-type: none"> ○ Did you face any challenges specific to the registration for the insurance or mobile banking? Which ones? ○ Did you face any challenges specific to the utilization of the insurance or mobile banking? ○ Did you face any challenges specific to the public work programme? ○ Were there some promises or expectations by SIE that were not fulfilled? ○ Were there any barriers or challenges that prevented you from fully profiting from the programme?
4.1	<ul style="list-style-type: none"> • As a farmer, you may at times have to spend money on livestock, fodder, veterinary services, water. Since you participated in the SIPE, did your investments in livestock or productive assets change? e.g. did you buy livestock, fodder, veterinary services, water? • If yes:

	<ul style="list-style-type: none"> ○ What exactly did you buy, when and how? ○ What challenges (if any) did you face when attempting to make these investments? ○ What was the motivation for the investment? ○ Did the insurance payment contribute to this purchase? How so? • If not: <ul style="list-style-type: none"> ○ Why did you not make any investments? ○ What kind of change would you need, to be able to invest?
4.2.	<ul style="list-style-type: none"> • Did you or any of your household members participate in any Public Works activities in the past year? • If yes: <ul style="list-style-type: none"> ○ What was the reason you participated? PNSP vs. SIPE? [did you do different tasks for different programmes?] ○ In which way (if any) did you benefit from participating in these public work activities? • If no: <ul style="list-style-type: none"> • Why did you not participate? (e.g., No obligation? No information where/how to participate?)
2.2	<ul style="list-style-type: none"> • The public work activities were meant to increase community assets. Did these activities increase shared assets of the community, if yes which ones? (e.g. public irrigation system) • If yes, did you utilise the shared community assets? If yes, how? If not, why not? Please tell me more
4.3, 5.3	<ul style="list-style-type: none"> • In the past year, what challenges did your community face? Which of these challenges also affected your household? For example: <ul style="list-style-type: none"> ○ Drought? ○ Flooding? ○ Food insecurity/Lack of food? ○ Land disputes? ○ Other resource-based/ethnic/clan tensions or conflicts? ○ Any other challenges? ○ When and how did these challenges last affect you and your household? <p>[Note: please ask for the challenges mentioned above; if mentioned, especially drought and lack of food, conflict]</p> <ul style="list-style-type: none"> • How did you deal with those challenges? (e.g. sell livestock, marry children, change food/eating habits, migrate to other places, borrow money, rely on traditional assistance (Irmaansi, Gadiid Celis, Xoo)? • What difference did SIPE make in how you cope/react to the distress? <ul style="list-style-type: none"> ○ Did you do anything differently, now that you are a beneficiary of SIPE? If yes, what? If not, why not?

	<ul style="list-style-type: none"> ○ Did you utilise the SIIPE insurance or community assets? If yes, how, if not, why not? ● How much could you recover from that shock/challenge? <ul style="list-style-type: none"> ○ Would you do anything differently if you faced the same challenge again? ○ What was/is the best coping mechanism, in your experience? ○ How would you react in the future?
4.4, 4.5	<ul style="list-style-type: none"> ● Before you joined SIIPE, what was your/your household's main income source? ● Since you joined SIIPE did you change your main income source, if yes in which way? ● Since you joined SIIPE did you diversify your income sources / did you add other sources of income to your main source? If yes, how, if not, why not? <ul style="list-style-type: none"> ○ What are the reasons? ○ What are the obstacles to having an additional income source? ● What are the obstacles to having an additional income source? ● Since you joined SIIPE, has your income been more stable, less stable, or the same? Why? ● Since you joined SIIPE, did your income increase, decrease, or remain the same? Why? ● In what way (if any) did your participation in SIIPE affect your income? <ul style="list-style-type: none"> ○ HAS SIIPE contributed to an increase in your (monthly or yearly) income? If yes, how so? If not, why not? ○ Has SIIPE contributed to the income stability of your household? If yes, how so? If not, why not? ○ Has SIIPE made any contribution to you/your household's engagement in alternative income generation? If yes, how so? If not, why not? ○ What alternative income/livelihood source did you engage in as a result of SIIPE? ● In your perception, what can you do to make sure you always generate enough income?
4.6	<ul style="list-style-type: none"> ● (If applicable) How have you and your family benefited from the improved income and protection (as a result of SIIPE)? <ul style="list-style-type: none"> ○ In what way (if any) are there any changes in your children's access to and retention in schools? ○ In what way (if any) are there any changes in your children's engagement in work? ○ In what way (if any) are there any changes in your decision to send your children off for (early) marriage? ○ In what way (if any) are there any changes in affording to provide a variety of food for your children and or other family members? ○ In what way (if any) are there any changes in affording healthcare to individual family members? ○ In which way (if any) did the situation of women and girls in your household improve? ○ In what way (if any) are there any other benefits/changes?

5.2.	<ul style="list-style-type: none"> • If you have to, are you willing to pay for the partially subsidised insurance coverage and for livestock insurance in general? <ul style="list-style-type: none"> ○ If yes, why? If not, why not? ○ How much are you willing to pay? ○ What would the timing of the payment be like? (How often?) ○ How much are you able to pay? ○ From what source do you think you will get the money to pay for this?
5.4.	<ul style="list-style-type: none"> • Do you have access to a mobile bank account? Do you use this account? if yes: <ul style="list-style-type: none"> ○ What are the reasons you opened it up? If no: <ul style="list-style-type: none"> ○ Why don't you have a mobile bank account? ○ What are the alternatives to a mobile bank account? Formal bank account, no account? • Since joining SIPE, do you use financial services more often? Please explain. <ul style="list-style-type: none"> ○ What are these financial services? ○ Do you use mobile banking more? Why?
8.4.	<ul style="list-style-type: none"> • Do you think men and women can equally benefit from the SIPE? What are some challenges that make it harder for one group? How? <p>For women only:</p> <ul style="list-style-type: none"> • As a woman, did you have more difficulties accessing the services of SIPE? (e.g. lack of awareness, lack of family support, lack of financial decision-making power, lack of mobility etc.)? If yes, which ones? • Is there anything the programme could do better to make it easier for you, as a woman, to profit from its services?
8.5	<ul style="list-style-type: none"> • Did you or any of your family members recently suffer from a lack of food, poor quality of food, or an unbalanced diet? If yes, what are the reasons? Is it different for different family members? <ul style="list-style-type: none"> ○ In which way could you be supported to get better access to healthy food?
9.1.	<ul style="list-style-type: none"> • What, if anything, was the biggest benefit you got from the SIPE programme? <ul style="list-style-type: none"> ○ Can you give me examples of how this project has helped you? • For successful beneficiaries only: Some other SIPE participants did not fare as well as you. Why do you think you were successful? <ul style="list-style-type: none"> ○ Did you do anything differently than others? Was your situation different than the situation of your peers that did not succeed? ○ Is there any advice you could give SIPE participants like you? • Is there anything the SIPE programme can do differently to better support you or people like you?

	<ul style="list-style-type: none"> What are the things, if any, that you suggest being improved?
10.3.	<ul style="list-style-type: none"> Did you ever have any complaints about the programme? If yes which ones, if not, why not? Did the programme staff request feedback from you about the programme? If so, did you give it? If you had complaints or suggestions, were there ways for you to communicate them to the programme staff? (e.g. talking to them, using complaint boxes or hotlines) Did your or other beneficiaries' complaints result in any change? If so, please tell me more about what changed. If not, why do you think was the reason?
End	<ul style="list-style-type: none"> We reached the end of the interview. Is there anything else you would like to add?

In-Depth Interview tool

Date	Location	Interviewer

Introductory Statement

Good morning/afternoon/evening. My name is _____. I am part of a research team from C4ED, a German research centre, that is conducting a study on SIIPE (WFP).

The purpose of this interview is to get more insights into the implementation of SIIPE.

Throughout the interview, please do not hesitate to speak up. You are free to share any additional information with me that was not directly covered by the questions. I am interested in your candid opinions. There are no right or wrong answers.

The participation in the interview is completely voluntary. You can refuse to answer any of the questions that you do not want to answer, or you can stop to discuss any question at any time. Your comments and the information collected will be kept strictly confidential. Your name and any other identifying information will be accessible only to the researchers and will never appear in any sort of report.

If you have any questions at any time, please feel free to stop me and ask. Thank you very much for agreeing to participate in today's Interview.

Thank you very much for your participation. Please feel free to ask any questions you may have about the study.

- If you have questions that you would like to discuss after the session, including how your data will be used, you can contact:
Ms. Nolawit Teshome.
Tel. 0949180842 / nolawit.teshome@c4ed.org
Qualitative Research Manager at the Center for Evaluation and Development (C4ED)
- If you wish to raise any concerns about the discussion or the researcher(s) who took part in it, you can do so directly via this e-mail address: complaints@c4ed.org

Informed Consent

DE/ETCO/2022/024

With your permission I would like to audio record the interview. This way, I can free me from taking notes and can listen to the interview again later. The audio recording will solely be used for research purposes and will be treated with strict confidentiality. [Audio recording will be abandoned if participants object.]

Do you have any questions before we start?

Name of Informant	Role/position	Contact Details	Signature

Instructions:

The following guide provides a comprehensive list of questions for different key informants in different roles representing different organizations. Before and during the interview, please choose the relevant questions that fit the role and position of the individual key informant and ignore questions that are irrelevant.

Draft interview guide:

EQs	
	Can you briefly explain your role in the SIPE programme? <ul style="list-style-type: none">- What are your tasks and responsibilities?- Since when are you involved?
1.2	To what extent were you or your employer involved in the design of the SIPE programme? <ul style="list-style-type: none">- How were they/you involved? (e.g. forum, consultation, etc.)- To what extent were beneficiaries, or their representative organizations involved?- How did this affect the design of the programme? (Examples?)
8.4	<p>For programme implementers only: In which way is gender mainstreaming considered in programme design and implementation?</p> <ul style="list-style-type: none">- Staffing: In which way was gender balance and representation considered in programme staffing? Did the programme have a gender specialist to consult and/or gender focal persons? Did the programme team receive training on gender mainstreaming? If yes, from your experience, what lessons were learned from it?- Planning: Are there any gender-specific indicators? Were targets disaggregated by gender? Were men/women consulted during the situation/needs analysis and programme planning? In which way did the programme's needs/situation analysis consider differentiated needs and how did the programme design respond?- Implementation: In which way did the programme implement activities that were tailored toward the different needs of men and women? Did the programme encounter different challenges for enrolling or retaining male or female beneficiaries? How did the programme respond?- Reporting and outcomes: Did you have gender-disaggregated monitoring mechanisms? If yes, what was the ratio between male/female participants? If applicable, did you achieve your targets for male/female beneficiaries? Why/why not? Did you experience any differentiated outcomes for males/females, if yes, why? <p>What were the main barriers with regard to gender mainstreaming?</p> <p>What could be improved to provide men and women the same opportunities to profit from</p>

	SIPE?
8.4	<p>For government representatives and insurance providers only: Talking about differences between men and women, what are/were the main barriers for them to access and profit from the SIPE insurance scheme?</p> <ul style="list-style-type: none"> • How did you or SIPE respond to those challenges? • Did you experience any differentiated outcomes for male or for female beneficiaries? If yes, how and why? (e.g. programme enrolment, vulnerability to shocks, increase in assets etc.) • What could be improved to provide men and women the same opportunities to profit from SIPE?
10.1, 10.2	<p>Were there any capacity needs and gaps identified by the programme stakeholders at the beginning of the programme?</p> <ul style="list-style-type: none"> • If so, what were these needs and gaps? <p>What measures did the programme take to address these needs and gaps?</p> <ul style="list-style-type: none"> - Were there any capacity-strengthening activities or strategies implemented by the programme to address those needs and gaps? <p>Can you please tell me more about this, using examples of activities/strategies that were implemented?</p>
2.2.	<p>For programme implementers only: In what way (if any) has the SIPE helped increase assets within targeted communities?</p> <ul style="list-style-type: none"> • What assets have increased and how? • What barriers (if any) were encountered for the construction (provision or utilization of these assets? • Is there anything SIPE can do differently to (further) increase community assets?
2.3.	<ul style="list-style-type: none"> • In your opinion, were there any challenges that made the SIPE programme less effective? <ul style="list-style-type: none"> ○ In your perception, did beneficiaries have sufficient awareness and understanding about SIPE and its benefits? If yes, why? If not, why not? ○ Which challenges (if any) were/are faced in the registration/uptake of insurance or mobile banking by households? How were the challenges encountered? (e.g. problems using phone/technology? Network? Mistrust? Distance to agent? Others?) ○ Which challenges (if any) were encountered for beneficiaries' usage of insurance / mobile banking accounts? (E.g. problems with submission or payouts of insurance claims, mistrust, lack of awareness) ○ Which challenges (if any) were faced by beneficiaries engaging in Public Work activities and profiting from community assets? ○ Which challenges (if any) did you have in collaboration among different stakeholders?)

	<ul style="list-style-type: none"> ○ Which challenges (if any) were created by external factors during implementation? • How were the challenges addressed?
8.1.	<p>For programme implementers and government representatives only: Can you explain how the programme engages with local/ regional and national offices of the government?</p> <ul style="list-style-type: none"> • Which SIIPE activities are connected to which regional bureaus' (BoANRD and BoLPD) annual work plans? • Are there any gaps in this collaboration structure? Please tell me more. • How well did the collaboration work so far? Which challenges did you experience? Which success stories can you share? • What could be done differently in the future to improve collaboration?
8.2.	<p>For programme implementers only: What strategies, structures, and competencies are in place for successfully promoting public and private uptake?</p> <ul style="list-style-type: none"> • Are there any partnerships formed and maintained for delivery of insurance products and services? • How promising are these partnerships? • How successful has the uptake by public and private stakeholders been so far? • Have there been any challenges? Please share. • From your experience, what can be done to improve public / private uptake?
8.2	<p>For insurances/government representatives only: The SIIPE programme supports so called public / private partnerships (PPP), collaborating with the government and public and private insurance providers. How has your experience been working with this model?</p> <ul style="list-style-type: none"> • Can you explain how the collaboration between you and the SIIPE works? • Why did you decide to join? • Have there been any challenges? Please state. • From your experience, what can be done to improve public / private uptake?
8.3	<p>For programme implementers and government representatives only: What is your take on the cost vs long-term benefit of SIIPE approach compared to conventional emergency assistance?</p> <ul style="list-style-type: none"> • Is the SIIPE approach more cost-intensive compared to conventional emergency assistance approaches? If yes, in which way? If not, why not? <ul style="list-style-type: none"> ○ In what way (if any) does the SIIPE approach provide a better long-term benefit compared to conventional emergency assistance? ○ What evidence (anecdotal, monitoring data etc..) do you have to support this claim?

	<ul style="list-style-type: none"> • Can you give examples of other conventional emergency assistance programmes to compare the costs and benefits of SIPE against? How well did the CIPE programme fare compared to those?
8.5	<p>For programme implementers and government officials only:</p> <ul style="list-style-type: none"> • What are the most prominent reported causes for malnutrition in the programme's catchment area? • In which way does SIPE combat malnutrition? • In which way is SIPE aligned with and complements other governmental and UN programmes targeting malnutrition? • What are the reported successes in generating co-benefits among those programmes? What are the reported gaps? • How can SIPE intensify the mainstreaming of nutrition within the programme? How can collaboration be improved between programmes/stakeholders to have a better joint impact on nutrition?
9.1.	<p>We talked about some successes and challenges before. Apart from what you already mentioned, what were the biggest lessons learnt for you? What should the programme continue doing, and what could it do differently in the future?</p> <ul style="list-style-type: none"> • Related to awareness and understanding, mobilization and enrolment of beneficiaries? • Related to the needs and capacities of beneficiaries? • Related to the design of SIPE itself including its Theory of change, logframe, its timeline and budget? • Related to the implementation of activities and drivers and barriers? • Related to coordination and cooperation within the programme and with other stakeholders? • Related to country and global WFP structures and mechanisms? • Other? <p>Have you identified best practices that can be emulated or upscaled? Please tell me more about this with a few examples.</p> <p>Was there any need for improvement in the implementation of SIPE? How can/will the lessons learnt be addressed?</p>
9.2.	<p>For programme implementers only: How appropriate is SIPE's M&E and reporting system to track progress and generate information? In terms of</p> <ul style="list-style-type: none"> - Monitoring and tracking outputs - Measuring outcomes? Measuring quantitative and qualitative intended and unintended effects? - Measuring impacts - performance and capacities of implementing staff to monitor and track changes - gathering feedback and lessons learnt by all stakeholders? - Reporting and dissemination of information, and programme adaptation?

	<ul style="list-style-type: none"> - Have you identified best practices that can be emulated or upscaled? Please tell me more about this with a few examples. - Was there any need for improvement in the implementation of SIPE? How can/will the lessons learnt be addressed?
10.3	<p>For programme implementers only: Can you tell me about the programme’s complaint and feedback mechanism (CFM)? How does it work?</p> <ul style="list-style-type: none"> • What feedback channels can be used by beneficiaries? (e.g. phone, letter box etc.) • Is there an allocation of dedicated staff and resources to manage the CFM? • Did the staff experience or get training in complaint management? • How does the feedback management process work? • What were the challenges and the successes (when operating the feedback and complaint mechanism)? • How many beneficiaries (on average) share feedback per month? • What (topics) are most feedback/complaints about? • How did the programme respond? To what extent were activities adjusted based on the feedback received?
10.4	<p>Let us talk about the protection risks or harm that could be potentially caused or exacerbated by the programme</p> <ul style="list-style-type: none"> • What protection risks were identified by the programme? • How were they mitigated by the program? • Did the programme create awareness of protection risks among programme staff? <ul style="list-style-type: none"> ○ If yes, how? ○ If not, why not? (Is it because, for example, the staff already have enough experience or knowledge...?) - Are there any protection policies within the programme? <ul style="list-style-type: none"> ○ If so, how well are they implemented?
10.5	<p>Let us talk about collaboration with other Humanitarian-Development-Peacebuilding Nexus (HDPN) actors to address the drivers of the crisis and promote sustainable solutions.</p> <ul style="list-style-type: none"> • Is there any collaboration between the programme and other Humanitarian-Development-Peacebuilding Nexus (HDPN) actors? <ul style="list-style-type: none"> ○ What are these other actors? Can you give me examples? ○ Which ones work in close collaboration with the programme? • Were there any collaboration mechanisms established by the programme with other HDPN actors? <ul style="list-style-type: none"> ○ If so, what were these mechanisms? ○ What was the collaboration like? • How coherent were the programme’s activities with the priorities of these HDPN actors?
	<p>For programme implementers only:</p> <ul style="list-style-type: none"> • What can you tell me about SIPE’s effort to integrate veterinary services and financial services (credits & savings) through VSLAs?

	<ul style="list-style-type: none"> ○ Were the VSLAs established as planned? ○ Do you think the VSLAs have been helpful in facilitating access to veterinary services to beneficiaries? ○ If yes, how did they contribute? ○ If not, why not?
	We have reached the end of the interview. Is there anything more you would like to add?

Annex VI. Fieldwork agenda

Adadle Team																	
Date	11-Mar	12-Mar	13-Mar	14-Mar	15-Mar	16-Mar	17-Mar	18-Mar	19-Mar	20-Mar	21-Mar	22-Mar	23-Mar	24-Mar	25-Mar	26-Mar	27-Mar
Kebele	Biyole	Burseredo	Gebel	Harsug	Higlo	Melkeselah	Sigole	Todob	Bohal Hagere	Afade	Elimorane	Debefid	Defdefe	Halogududu	Jiyre	Morodule	Wardid
Bokolmayo and Dolo Ado Team																	
Date	11-Mar	12-Mar	13-Mar	14-Mar	15-Mar	16-Mar	17-Mar	18-Mar	19-Mar	20-Mar	21-Mar	22-Mar	23-Mar	24-Mar	25-Mar	26-Mar	27-Mar
location	Hawalhaji Kebele	Kobe Kebele	BOKOLMAYO_01 KEBELE	Seblalie Kebele	Bereren Kebele	Melkeda Kebele	Dergalie Kebele	Durdurder Kebele	Sedey Kebele	Amino	Biyole	Daytule	Driburis	Fikow	Holmoge	Rama	Shanbel
Date	28-Mar	29-Mar	30-Mar	31-Mar	01-Apr	02-Apr	03-Apr	04-Apr	05-Apr								
location	Sigalaw	Washakiber	Wedlohube	Beadwoyin Kebele	Bardaley	Boryale	BurAmino	Helewoyin	Kilmisin ge								
Kebridehar and Debeweyin Team																	
Date	11-Mar	12-Mar	13-Mar	14-Mar	15-Mar	16-Mar	17-Mar	18-Mar	19-Mar	20-Mar	21-Mar	22-Mar	23-Mar	24-Mar	25-Mar	26-Mar	27-Mar
location	Delat	Elhar	Kerembiele	Merato	Tukale	Dadin	Dudied	Forche	Melkafoyin	Derkenweid	Harano	Harunta	Jidale	Negedwein	Awlesar	Delala	Kalankale
Elkare /Serer Team																	

Date	11-Mar	12-Mar	13-Mar	14-Mar	15-Mar	16-Mar	17-Mar	18-Mar	19-Mar	20-Mar	21-Mar	22-Mar	23-Mar	24-Mar	25-Mar	26-Mar	27-Mar
location	Unko	Gololo	Harabukira	Kuturi	Shakisa	Ademo	Awraga	Bedewu	Dare Chorora	Elmudo	Elod	Lasbar	Mesile	Tewley	Denduba	Garado	Gola Korma

Date	28-Mar	29-Mar	30-Mar	31-Mar	01-Apr
location	Hantutu	Hatura	HADA	GARADO	DENDUBA

West Imi team

Date		12-Mar	13-Mar	14-Mar	15-Mar	16-Mar	17-Mar	18-Mar	19-Mar	20-Mar	21-Mar	22-Mar	23-Mar	24-Mar	25-Mar	26-Mar
location	Down	Majabe	Sufile	Dare Selam	Below	Abakoroo	Bari mili	Berisiboo	Bola	Finichawu	Dale	MIRAB EMiy-02	Bia'De	Dikey	Gulibr Wako	Kobow

Annex VII. Mapping of findings, conclusions and recommendations

Recommendation <i>[in numerical order]</i>	Conclusions <i>[by number(s) of conclusion]</i>	Findings <i>[by number of finding]</i>
Recommendation 1: Enhanced awareness and education campaigns that are key to ensuring high understanding and adoption of the programme	Conclusion 5	Findings 12, 13, 14
	Conclusion 11	Findings 35 and 36
	Conclusion 9	Finding 25, 26, 27, 28
Recommendation 2: Simplified enrolment and claim ensure that beneficiaries can access the services with ease, facilitating demand and take-up	Conclusion 1	Findings 1, 32, 33, 35, 36
	Conclusion 6	Finding 15, 16
Recommendation 3: Customised insurance products may enhance uptake through a wider variety of options and a more holistic programme approach	Conclusion 4	Findings 6, 7, 8, 9, 10, 11
	Conclusion 8	Findings 22, 23, 24, 31
Recommendation 4: Improve the claims process to ensure a transparent, timely, efficient and useful system for beneficiaries	Conclusion 9	Findings 25, 26, 27, 28
	Conclusion 2	Finding 3
Recommendation 5: Strengthened partnerships between all entities working on the group would ensure an improved uptake and engagement by potential beneficiaries and increase the relevance of the programme to the target groups	Conclusion 2	Finding 4
	Conclusion 11	Findings 36, 37
Recommendation 6: Recruiting more female staff at woreda level would help create a more conducive space more conducive for female	Conclusion 10	Finding 29, 30

Recommendation <i>[in numerical order]</i>	Conclusions <i>[by number(s) of conclusion]</i>	Findings <i>[by number of finding]</i>
beneficiaries to freely share their concerns		

Annex VIII. Key informants' overview

No.	Organization	Position/unit/relationship with SIIPE
1	WFP CO	Head of Evaluation
2	WFP CO	Evaluation Manager
3	WFP CO	WFP Programme Officer (Insurance)
4	WFP CO	WFP Programme Officer and SIIPE Regional Coordinator, Jijiga Somali
5	WFP CO	WFP ETHCO, M&E Unit
6	WFP CO	Programme Policy Officer GIS Mapping
7	Mercy Corps	SIIPE Project Coordinator
8	ILRI	ILRI, Research Officer
9	BoANRD	SIIPE focal
10	BoLPD	SIIPE focal
11	BoLPD	SIIPE focal
12	WFP CO	Team Lead, Innovations, Financial Inclusion, and Insurance
13	WFP CO	Deputy Country Director
14	DANIDA	SIIPE Focal Person
15	Embassy of Sweden	First Secretary at the Humanitarian affairs, resilience, HDP nexus
16	Nyala Insurance	Micro and Agricultural Insurance Business Manager
17	Shabelle Bank	HelloCash focal person
18	Somali Micro Finance	Digital banking officer
19	Individual	Community leader in Adadle woreda
20	Individual	Community leader in Kebridehar woreda
21	Woreda Livestock and Pastoralists Development Office	Adadle woreda official

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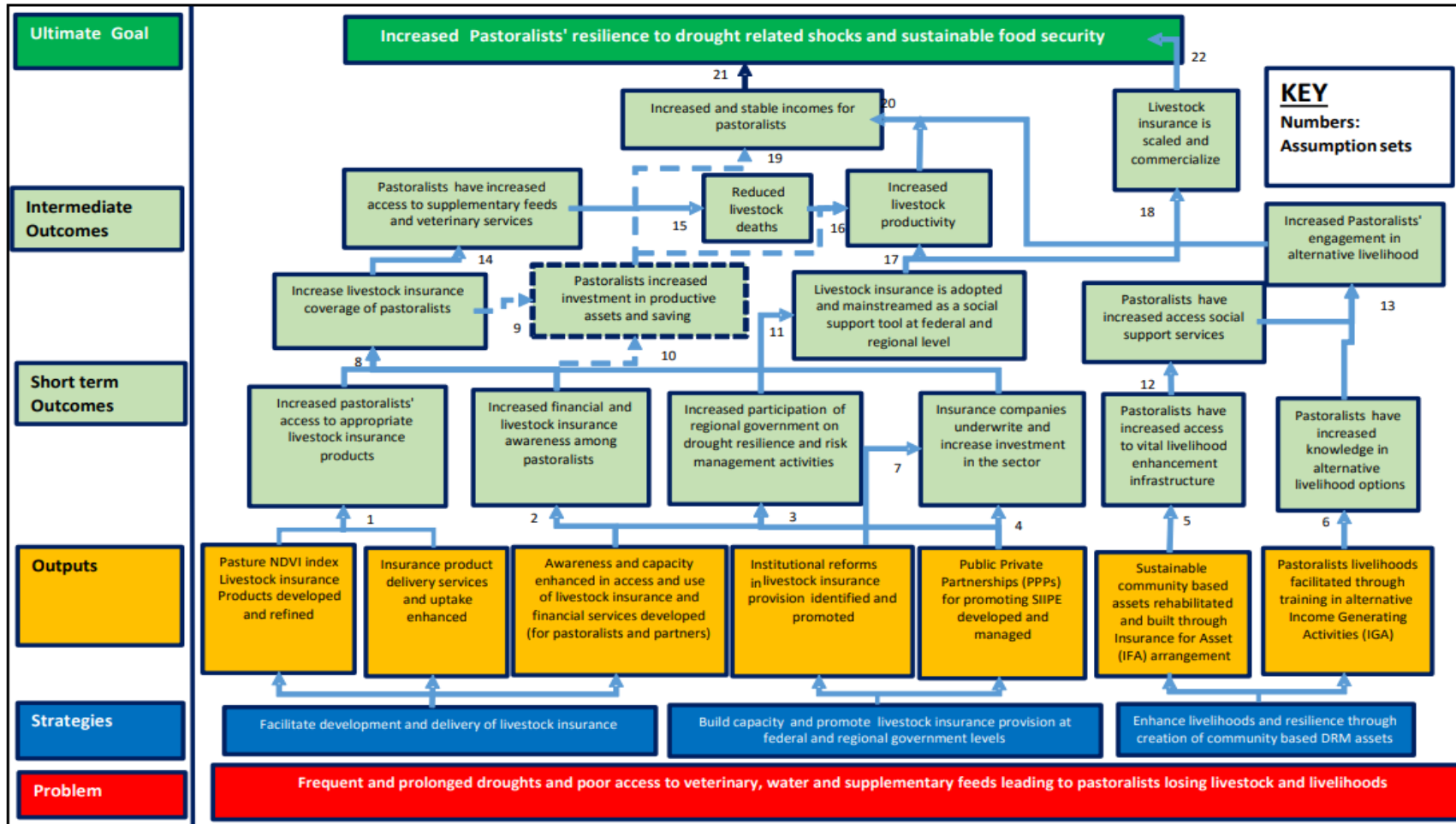
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Annex X: Reconstructed Theory of Change



Assumption Ref. no.	Summary description of embedded assumptions underpinning the causal links
1.	<ul style="list-style-type: none"> - SIIPE's basis risk is minimise - Insurance delivery systems are appropriate and adaptable to pastoralists' context - Insurance units are appropriately and consistently identified
2.	<ul style="list-style-type: none"> - SIIPE's capacity building approaches/methods are appropriate and efficient - Partnerships and platforms are able to attract the right partners on board
3.	<ul style="list-style-type: none"> - Regional government prioritises livestock insurance as a social protection tool and invests in it
4.	<ul style="list-style-type: none"> - The bottlenecks to increased participation of the private sector in livestock insurance are appropriately identified and solutions are pursued. - Partnerships and platforms can attract the right partners
5.	<ul style="list-style-type: none"> - Identified public works match local livelihood constraints faced by pastoral
6.	<ul style="list-style-type: none"> - Extension and training approaches are effective and appropriate - Pastoralists have positive attitudes onwards alternative livelihood approaches
7.	<ul style="list-style-type: none"> - There exists adequate demand for WFP's Insurance For Asset (IFA) arrangement - Bottlenecks to increased participation of the private sector in livestock insurance are identified and targeted interventions implemented
8.	<ul style="list-style-type: none"> - Insurance companies find it profitable to invest in a meso-level insurance product - There exists adequate demand for WFP's Insurance For Asset (IFA) arrangement
9.	<ul style="list-style-type: none"> - SIIPE's knowledge transfer approaches/tools can influence pastoralists' attitudes towards embracing insurance and financial management
10.	<ul style="list-style-type: none"> - SIIPE's knowledge transfer approaches/tools can influence pastoralists' attitudes towards embracing insurance and financial management
11.	<ul style="list-style-type: none"> - Regional government prioritises livestock insurance as a social protection tool and invests in it
12.	<ul style="list-style-type: none"> - Livelihood support infrastructure is appropriate
13.	<ul style="list-style-type: none"> - Pastoralists are willing to try out new and alternative livelihood approaches - SIIPE leverages on WFP existing infrastructure and expertise e.g. on ongoing programs like PSNP
14.	<ul style="list-style-type: none"> - Insurance companies make timely payouts - Pastoralists consider the insurance product as a livestock protection intervention
15.	<ul style="list-style-type: none"> - The monetary payout estimates are consistent with the high variability of livestock nutritional demands - Pastoralists use the pay-out on their core breeding animals as advised by SIIPE
16.	<ul style="list-style-type: none"> - Pastoralists can access supplementary livestock production and productivity inputs and services
17.	<ul style="list-style-type: none"> - There exist appropriate institutions and mechanisms for promoting commercial livestock insurance
18.	<ul style="list-style-type: none"> - There exist appropriate institutions and mechanisms for promoting SIIPE

Annex XI: Results Framework/Line of Sight



Annex XII. Additional results from household survey data

Finding 6

Table 29. Gender disaggregated results for livestock-related expenditure

	Full sample	Male	Female	Difference
Household total livestock-related expenditure	695.1 (1,663.3)	720.1 (1,620.8)	644.8 (1,746.0)	75.3
Household expenditure on forage/fodder	246.0 (794.2)	262.5 (803.7)	212.7 (774.2)	49.8
Household expenditure on water	127.7 (658.5)	130.0 (670.3)	122.8 (634.4)	7.2
Household expenditure on veterinary medicine	282.1 (698.8)	291.1 (694.6)	264.0 (707.4)	27.1
Household expenditure on other livestock-related activities	39.4 (364.1)	36.5 (360.9)	45.2 (370.6)	-8.7
Number of observations	2,112	1,412	700	

Note: The table presents summary statistics for the 2142 study households interviewed. Columns (1), (2) and (3) present sample means and standard deviations (in parentheses) for households in the full sample, the treatment group and the comparison group, respectively. Column (4) reports the difference in group means with stars indicating the result of the t-test for the comparison of means. Significance stars: * $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$.

Table 30. Differences in livestock related investments in sample

	Full sample	Treatment	Comparison	Difference
% of Households that have purchased forage/fodder	15.7 (36.4)	18.8 (39.1)	12.6 (33.2)	6.2***
% of Households that have purchased water	6.3 (24.2)	9.2 (28.9)	3.3 (17.8)	5.9***
% of Households that have purchased veterinary medicine/services	29.5 (45.6)	33.6 (47.2)	25.4 (43.5)	8.2***
% of Households that have spent on other livestock-related activities	3.3 (17.9)	5.2 (22.2)	1.4 (11.8)	3.8***
% of Households with at least one type of livestock expenditure	37.8 (48.5)	43.4 (49.6)	32.1 (46.7)	11.4***
% Households with expenditure on all types of livestock-related activities	0.7 (8.3)	1.3 (11.3)	0.1 (3.1)	1.2***
Number of observations	2,142	1,075	1,067	

Note: The table presents summary statistics for the 2142 study households interviewed. Columns (1), (2) and (3) present

sample means and standard deviations (in parentheses) for households in the full sample, the treatment group and the comparison group, respectively. Column (4) reports the difference in group means with stars indicating the result of the t-test for the comparison of means. Significance stars: * $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$.

Finding 7

Table 31. Gender disaggregated results for asset ownership

	Full sample	Male	Female	Difference
Number of total assets owned by the household in 2024	11.0 (5.9)	10.7 (5.5)	11.8 (6.6)	-1.1***
Productive asset index score in 2024	0.0 (1.6)	-0.1 (1.5)	0.2 (1.7)	-0.3***
Durable asset index score in 2024	0.0 (1.7)	-0.0 (1.7)	0.0 (1.7)	-0.0
Number of observations	2,112	1,412	700	

Note: The table presents summary statistics for the 2142 study households interviewed. Columns (1), (2) and (3) present sample means and standard deviations (in parentheses) for households in the full sample, the treatment group and the comparison group, respectively. Column (4) reports the difference in group means with stars indicating the result of the t-test for the comparison of means. Significance stars: * $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$.

Table 32. Differences in household assets (total) and ownership of jewellery of sample

	Full sample	Treatment	Comparison	Difference
Number of total assets owned by the household	11.0 (5.9)	11.0 (6.2)	11.0 (5.6)	0.0
Weight of Jewels owned by the household- Gold (in grams)	2.2 (2.4)	1.4 (0.5)	3.7 (3.8)	-2.3
Weight of Jewels owned by the household- Silver (in grams)	1.7 (2.2)	1.0 (0.0)	2.2 (2.9)	-1.2
Land owned/managed by household (in hectare)	1.8 (1.2)	1.9 (1.3)	1.7 (1.1)	0.2***
Number of observations	2,142	1,075	1,067	

Note: The table presents summary statistics for the 2142 study households interviewed. Columns (1), (2) and (3) present sample means and standard deviations (in parentheses) for households in the full sample, the treatment group and the comparison group, respectively. Column (4) reports the difference in group means with stars indicating the result of the t-test for the comparison of means. Significance stars: * $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$.

Table 33. Differences in housing characteristics of sample

	Full sample	Treatment	Comparison	Difference
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Households with an improved floor in their house	17.4 (37.9)	16.7 (37.4)	18.1 (38.5)	-1.3
Households with an improved wall in their house	58.7 (49.3)	61.0 (48.8)	56.3 (49.6)	4.7**
Households with an improved roof in their house	31.5 (46.5)	24.1 (42.8)	39.0 (48.8)	-14.9***
Number of rooms (excluding kitchen and toilet) the dwelling has	1.5 (0.6)	1.4 (0.6)	1.5 (0.6)	-0.1**
Number of observations	2,142	1,075	1,067	

Note: The table presents summary statistics for the 2142 study households interviewed. Columns (1), (2) and (3) present sample means and standard deviations (in parentheses) for households in the full sample, the treatment group and the comparison group, respectively. Column (4) reports the difference in group means with stars indicating the result of the t-test for the comparison of means. Significance stars: * $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$.

Table 34. Differences in sources of lighting in sample

	Full sample	Treatment	Comparison	Difference
Electricity	1.9 (13.5)	1.3 (11.3)	2.4 (15.4)	-1.1*
Kerosene	448.2 (2,069.5)	502.3 (2,185.3)	393.6 (1,945.5)	108.7
Gas lamp	4.6 (21.0)	6.0 (23.7)	3.3 (17.8)	2.7***
Candles/torches	50.5 (50.0)	46.0 (49.9)	55.0 (49.8)	-9.1***
Battery light	38.4 (48.7)	40.1 (49.0)	36.7 (48.2)	3.4
Charcoal	5.7 (23.2)	6.5 (24.7)	4.9 (21.5)	1.6
Solar energy	8.5 (27.8)	10.5 (30.7)	6.4 (24.4)	4.1***
Generator	0.7 (8.3)	0.5 (6.8)	0.9 (9.6)	-0.5
No light	1.5 (12.3)	1.5 (12.1)	1.6 (12.5)	-0.1
Other source	1.3 (11.4)	1.3 (11.3)	1.3 (11.4)	-0.0
Number of observations	2,142	1,075	1,067	

Note: The table presents summary statistics for the 2142 study households interviewed. Columns (1), (2) and (3) present sample means and standard deviations (in parentheses) for households in the full sample, the treatment group and the comparison group, respectively. Column (4) reports the difference in group means with stars indicating the result of the t-test for the comparison of means. Significance stars: * $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$.

Finding 8

Table 35. Differences in coping mechanisms and reported distress sales in sample

	Full sample	Treatment	Comparison	Difference
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No. of shocks reported by household in last year (out of 19)	1.6 (1.1)	1.6 (1.1)	1.7 (1.1)	-0.1
% of households that have:				
- Relied on remittances or support from others (relatives, friends, community members)	2.5 (15.6)	2.3 (15.1)	2.6 (16.0)	-0.3
- Sold livestock	23.1 (42.2)	21.0 (40.8)	25.2 (43.4)	-4.1**
- Sold assets other than livestock and crop stock	0.1 (3.3)	0.2 (4.7)	0.0 (0.0)	0.2
- Bought forage or fodder for animals	0.4 (6.6)	0.7 (8.2)	0.2 (4.7)	0.5
- Bought water for animals	0.2 (4.1)	0.2 (4.7)	0.1 (3.3)	0.1
- Vaccinated animals or used veterinary services	1.2 (10.9)	1.6 (12.4)	0.9 (9.3)	0.7
- Migration of household member(s)	0.3 (5.2)	0.2 (4.7)	0.3 (5.7)	-0.1
Number of observations	2,142	1,075	1,067	

Note: The table presents summary statistics for the 2142 study households interviewed. Columns (1), (2) and (3) present sample means and standard deviations (in parentheses) for households in the full sample, the treatment group and the comparison group, respectively. Column (4) reports the difference in group means with stars indicating the result of the t-test for the comparison of means. Significance stars: * $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$.

Table 36. Gender disaggregated result for coping strategies used by household

	Full sample	Male	Female	Difference
Number of coping strategies adopted by household in last year (out of 22)	1.7 (1.1)	1.7 (1.1)	1.7 (1.1)	-0.0
% of households that engaged in stress-coping strategies	86.4 (34.3)	87.3 (33.3)	84.4 (36.3)	2.9*
% of households that engaged in crisis-coping strategies	80.7 (39.5)	81.7 (38.7)	78.6 (41.1)	3.2*
% of households that engages in emergency-coping strategies	81.7 (38.7)	82.5 (38.0)	80.1 (39.9)	2.4
Reduced Consumption Strategies Index Score	12.3 (9.7)	12.7 (10.2)	11.5 (8.7)	1.2***
Number of observations	2,112	1,412	700	

Note: The table presents summary statistics for the 2142 study households interviewed. Columns (1), (2) and (3) present sample means and standard deviations (in parentheses) for households in the full sample, the treatment group and the comparison group, respectively. Column (4) reports the difference in group means with stars indicating the result of the t-test for the comparison of means. Significance stars: * $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$.

Finding 9

Table 37. Gender disaggregated result for income level and sources

	Full sample	Male	Female	Difference
Number of income sources, 2024	1.6 (0.9)	1.6 (0.9)	1.7 (0.8)	-0.1***
Total Income, 2024	12,340.6 (15,741.2)	12,244.0 (16,926.5)	12,535.4 (13,035.1)	-291.4
Income received from selling livestock products, 2024	616.2 (2,865.7)	653.2 (3,124.2)	541.4 (2,255.5)	111.8
Number of observations	2,112	1,412	700	

Note: The table presents summary statistics for the 2142 study households interviewed. Columns (1), (2) and (3) present sample means and standard deviations (in parentheses) for households in the full sample, the treatment group and the comparison group, respectively. Column (4) reports the difference in group means with stars indicating the result of the t-test for the comparison of means. Significance stars: * $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$.

Table 38. Differences in numbers and types of income sources in sample

	(1) Full sample	(2) Treatment	(3) Comparison	(4) Difference
Number of income sources	1.6 (0.9)	1.6 (0.9)	1.6 (0.9)	-0.0
% of households selling own livestock	60.5 (48.9)	60.1 (49.0)	60.8 (48.8)	-0.7
livestock trade, not from own herd	2.8 (16.5)	3.2 (17.5)	2.4 (15.4)	0.7
% of households selling livestock products like milk, meat, skin etc.	7.8 (26.8)	10.5 (30.7)	5.1 (21.9)	5.5***
% of households selling crops or cereals	18.9 (39.1)	18.6 (38.9)	19.1 (39.3)	-0.5
% of households selling charcoal or firewood	6.8 (25.1)	6.4 (24.5)	7.1 (25.7)	-0.7
% of households selling grass or forage	2.5 (15.5)	2.2 (14.8)	2.7 (16.3)	-0.5
Income from shop	0.6 (7.5)	0.4 (6.1)	0.7 (8.6)	-0.4
Income from other business and pretty trading	2.5 (15.5)	2.0 (13.8)	3.0 (17.1)	-1.0
% of households' income from herding for pay	0.3 (5.3)	0.1 (3.0)	0.5 (6.8)	-0.4
Formal or salaried employment	0.6 (7.8)	0.7 (8.6)	0.5 (6.8)	0.3
Income casual or temporary labour jobs	3.8 (19.2)	3.6 (18.7)	4.0 (19.7)	-0.4
Income pension	0.0 (2.2)	0.0 (0.0)	0.1 (3.1)	-0.1

% of households who received money from PSNP	47.5 (49.9)	44.3 (49.7)	50.7 (50.0)	-6.4***
% of households who received remittances, gifts, or transfer	3.2 (17.5)	3.3 (17.8)	3.1 (17.3)	0.2
% of households who received a direct transfer from the government	0.1 (3.7)	0.1 (3.0)	0.2 (4.3)	-0.1
% of households who received support from NGOs	4.9 (21.7)	5.3 (22.4)	4.6 (20.9)	0.7
% of households who haven't received any	6.3 (24.4)	7.4 (26.3)	5.2 (22.3)	2.2**
Other sources of income	0.7 (8.1)	1.0 (10.1)	0.3 (5.3)	0.7**
Number of observations	2,142	1,075	1,067	

Note: The table presents summary statistics for the 2142 study households interviewed. Columns (1), (2) and (3) present sample means and standard deviations (in parentheses) for households in the full sample, the treatment group and the comparison group, respectively. Column (4) reports the difference in group means with stars indicating the result of the t-test for the comparison of means. Significance stars: * $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$.

Table 39. Differences in sources of income in the sample

	(1) Full sample	(2) Treatment	(3) Comparison	(4) Difference
Income from selling own livestock	6,217.1 (10,223.4)	5,934.9 (9,557.6)	6,501.4 (10,850.1)	-566.4
Income from livestock trade (not from own herd)	378.8 (3,414.0)	387.4 (3,474.9)	370.2 (3,353.2)	17.2
Income from selling livestock products	615.9 (2,871.2)	803.1 (3,476.3)	428.8 (2,083.3)	374.3***
Income from selling crops or cereals	1,694.7 (6,219.1)	1,538.4 (5,480.8)	1,852.3 (6,882.3)	-313.9
Income from PSNP	1,435.1 (2,465.4)	1,288.7 (2,164.6)	1,582.9 (2,728.8)	-294.1***
Income from remittances, gifts, or transfers	511.7 (6,498.7)	558.9 (6,486.2)	463.9 (6,513.9)	94.9
Income from support from NGOs	554.5 (3,303.4)	753.8 (4,052.8)	353.7 (2,299.7)	400.1***
income from other sources	730.3 (3,708.9)	631.1 (3,172.5)	830.6 (4,181.2)	-199.5
Number of observations	2,142	1,075	1,067	

Note: The table presents summary statistics for the 2142 study households interviewed. Columns (1), (2) and (3) present sample means and standard deviations (in parentheses) for households in the full sample, the treatment group and the comparison group, respectively. Column (4) reports the difference in group means with stars indicating the result of the t-test for the comparison of means. Significance stars: * $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$.

Finding 10

Table 40. Gender disaggregated result for stable income (sources and loss)

	Full sample	Male	Female	Difference
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Proportion of income from stable sources, 2024	0.2 (0.3)	0.2 (0.3)	0.2 (0.3)	0.0*
Number of months without income, 2023-24	0.7 (1.4)	0.7 (1.4)	0.7 (1.2)	0.0
Number of observations	2,112	1,412	700	

Note: The table presents summary statistics for the 2142 study households interviewed. Columns (1), (2) and (3) present sample means and standard deviations (in parentheses) for households in the full sample, the treatment group and the comparison group, respectively. Column (4) reports the difference in group means with stars indicating the result of the t-test for the comparison of means. Significance stars: * $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$.

Finding 11

Table 41. Differences in school absenteeism (by gender) in sample

	(1) Full sample	(2) Treatment	(3) Comparison	(4) Difference
% of households with boy child absent from school	81.3 (39.0)	81.0 (39.3)	81.5 (38.8)	-0.5
% of households with girl child absent from school	55.4 (49.7)	55.5 (49.7)	55.4 (49.8)	0.0
Number of observations	1,918	957	961	

Note: The table presents summary statistics for the 2142 study households interviewed. Columns (1), (2) and (3) present sample means and standard deviations (in parentheses) for households in the full sample, the treatment group and the comparison group, respectively. Column (4) reports the difference in group means with stars indicating the result of the t-test for the comparison of means. Significance stars: * $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$.

Table 42. Gender disaggregated result for wellbeing indicators

	Full sample	Male	Female	Difference
% of households with children absent from school	50.6 (50.0)	53.5 (49.9)	44.6 (49.7)	8.9***
% of households with children engaged in economic activities	11.0 (31.3)	11.0 (31.3)	11.0 (31.3)	0.0
% of household with married children (<18 years)	2.2 (14.8)	2.1 (14.4)	2.4 (15.4)	-0.3
Number of observations	2,112	1,412	700	

Note: The table presents summary statistics for the 2142 study households interviewed. Columns (1), (2) and (3) present sample means and standard deviations (in parentheses) for households in the full sample, the treatment group and the comparison group, respectively. Column (4) reports the difference in group means with stars indicating the result of the t-test for the comparison of means. Significance stars: * $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$.

Finding 12

Table 43. Differences in awareness and understanding of insurance and SIPE in sample

	(1) Full sample	(2) Treatment	(3) Comparison	(4) Difference
% of households that have heard of insurance (general)	56.6 (49.6)	78.2 (41.3)	34.9 (47.7)	43.4 ^{***}
% of households that have purchased insurance	27.9 (44.9)	35.7 (47.9)	10.2 (30.3)	25.5 ^{***}
Knowledge of insurance: number of correct responses to 7 test questions	2.5 (1.9)	3.1 (1.7)	2.0 (1.9)	1.1 ^{***}
Number of observations	2,142	1,075	1,067	

Note: The table presents summary statistics for the 2142 study households interviewed. Columns (1), (2) and (3) present sample means and standard deviations (in parentheses) for households in the full sample, the treatment group and the comparison group, respectively. Column (4) reports the difference in group means with stars indicating the result of the t-test for the comparison of means. Significance stars: * $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$.

Table 44. Gender disaggregated results for household knowledge of insurance

	Full sample	Male	Female	Difference
% of households that have heard of insurance (general)	56.3 (49.6)	57.1 (49.5)	54.9 (49.8)	2.2
Knowledge of insurance: number of correct responses to 7 test questions	2.5 (1.9)	2.6 (1.8)	2.4 (2.0)	0.2 ^{**}
% of households that have purchased insurance	27.7 (44.8)	24.8 (43.2)	33.9 (47.4)	-9.0 ^{***}
% of households willing to pay for livestock insurance	27.6 (44.7)	27.5 (44.7)	27.6 (44.7)	-0.0
Number of observations	2,112	1,412	700	

Note: The table presents summary statistics for the 2142 study households interviewed. Columns (1), (2) and (3) present sample means and standard deviations (in parentheses) for households in the full sample, the treatment group and the comparison group, respectively. Column (4) reports the difference in group means with stars indicating the result of the t-test for the comparison of means. Significance stars: * $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$.

Finding 13

Table 45. Difference in willingness to pay for livestock in sample

	(1) Full sample	(2) Treatment	(3) Comparison	(4) Difference
Willingness to pay to insure livestock	27.9 (44.9)	41.1 (49.2)	14.6 (35.3)	26.5 ^{***}
WTP for one camel (in ETB)	243.3 (478.8)	251.6 (521.8)	219.8 (328.0)	31.8

WTP for one cow (in ETB)	400.3 (1,332.6)	452.3 (1,524.7)	254.1 (454.7)	198.2
WTP for one shoat (in ETB)	165.9 (500.9)	190.7 (578.8)	95.7 (80.4)	95.0**
Number of observations	2,142	1,075	1,067	

Note: The table presents summary statistics for the 2142 study households interviewed. Columns (1), (2) and (3) present sample means and standard deviations (in parentheses) for households in the full sample, the treatment group and the comparison group, respectively. Column (4) reports the difference in group means with stars indicating the result of the t-test for the comparison of means. Significance stars: * $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$.

Table 46: Source of paying Insurance (for Cow)

	(1) Full sample	(2) Treatment	(3) Comparison	(4) Difference
Income from livestock sales	88.0 (32.5)	89.8 (30.4)	83.3 (37.4)	6.4**
Income from other economic activities (Wage labour, causal labour)	32.9 (47.0)	34.4 (47.6)	28.7 (45.4)	5.7
Saving (personal savings or VSLA savings)	6.8 (25.2)	7.8 (26.9)	4.0 (19.7)	3.8
Loans from family/friends	2.9 (16.7)	2.7 (16.2)	3.3 (18.0)	-0.7
Loans from formal financial institutions	0.5 (7.3)	0.2 (4.9)	1.3 (11.5)	-1.1
other sources	3.6 (18.6)	4.6 (21.0)	0.7 (8.2)	4.0**
Number of observations	560	410	150	

Note: The table presents summary statistics for the 560 study households who were willing to purchase insurance for cow. Columns (1), (2) and (3) present sample means and standard deviations (in parentheses) for households in the full sample, the treatment group and the comparison group, respectively. Column (4) reports the difference in group means with stars indicating the result of the t-test for the comparison of means. Significance stars: * $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$.

Table 47: Source of paying Insurance (for Camel)

	(1) Full sample	(2) Treatment	(3) Comparison	(4) Difference
Income from livestock sales	85.5 (35.2)	88.8 (31.6)	76.8 (42.4)	12.0***
Income from other economic activities (Wage labour, causal labour)	33.9 (47.4)	32.6 (47.0)	37.4 (48.6)	-4.8
Saving (personal savings or VSLA savings)	6.0 (23.8)	7.1 (25.8)	3.0 (17.2)	4.1
Loans from family/friends	1.9 (13.7)	2.2 (14.8)	1.0 (10.1)	1.2
Loans from formal financial	0.3	0.0	1.0	-1.0

institutions	(5.2)	(0.0)	(10.1)	
Other sources	3.0 (17.1)	4.1 (19.9)	0.0 (0.0)	4.1**
Number of observations	366	267	99	

Note: The table presents summary statistics for the 366 study households who were willing to purchase insurance for camel. Columns (1), (2) and (3) present sample means and standard deviations (in parentheses) for households in the full sample, the treatment group and the comparison group, respectively. Column (4) reports the difference in group means with stars indicating the result of the t-test for the comparison of means. Significance stars: * $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$.

Table 48: Source of paying Insurance (for Shoats)

	(1) Full sample	(2) Treatment	(3) Comparison	(4) Difference
Income from livestock sales	87.1 (33.5)	89.9 (30.1)	78.4 (41.3)	11.5***
Income from other economic activities (Wage labour, causal labour)	32.5 (46.9)	33.7 (47.3)	28.8 (45.4)	4.9
Saving (personal savings or VSLA savings)	5.5 (22.8)	5.6 (23.1)	5.0 (21.9)	0.6
Loans from family/friends	3.5 (18.5)	3.5 (18.4)	3.6 (18.7)	-0.1
Loans from formal financial institutions	0.7 (8.4)	0.5 (6.8)	1.4 (12.0)	-1.0
other sources	3.0 (17.1)	4.0 (19.6)	0.0 (0.0)	4.0**
Number of observations	566	427	139	

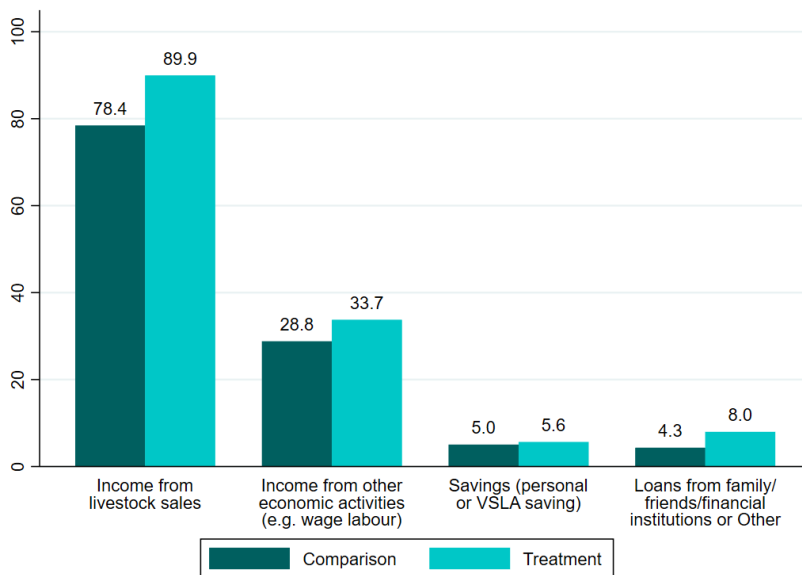
Note: The table presents summary statistics for the 2149 study households interviewed. Columns (1), (2) and (3) present sample means and standard deviations (in parentheses) for households in the full sample, the treatment group and the comparison group, respectively. Column (4) reports the difference in group means with stars indicating the result of the t-test for the comparison of means. Significance stars: * $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$.

Figure 16. Preferred source of financing insurance for camels



Source: Own elaboration based on endline household survey

Figure 17: Preferred source of financing insurance for shoats



Source: Own elaboration based on endline household survey

Finding 14

Table 49. Reasons for no willingness to pay for insurance

	(1) Full sample	(2) Treatment	(3) Comparison	(4) Difference
Don't have money to spend on insurance	69.3 (46.1)	83.6 (37.1)	59.4 (49.1)	24.2***
Did not understand insurance well enough to buy it	46.3 (49.9)	30.6 (46.1)	57.2 (49.5)	-26.5***
Don't trust any insurance companies	2.9 (16.8)	3.5 (18.3)	2.5 (15.7)	1.0
Can rely on family and friends	0.4 (6.2)	0.3 (5.6)	0.4 (6.6)	-0.1
I am a member of a group that provide informal insurance support	0.5 (6.7)	0.8 (8.9)	0.2 (4.7)	0.6
other reason	4.4 (20.5)	5.1 (21.9)	4.0 (19.5)	1.1
Number of observations	1,544	633	911	

Note: The table presents summary statistics for the 2142 study households interviewed. Columns (1), (2) and (3) present sample means and standard deviations (in parentheses) for households in the full sample, the treatment group and the comparison group, respectively. Column (4) reports the difference in group means with stars indicating the result of the t-test for the comparison of means. Significance stars: * $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$.

Finding 15

Table 50. Gender disaggregated results for access to and use of financial services

	Full sample	Male	Female	Difference
% of households with access to a mobile banking account	52.0 (50.0)	54.5 (49.8)	47.1 (50.0)	7.3***
% of households that use a mobile banking account	27.4 (44.6)	31.7 (46.6)	18.6 (38.9)	13.2***
% households that participate in VSLAs	8.3 (27.6)	8.5 (27.9)	8.0 (27.1)	0.5
% households that participate in ROSCA/Merry-go-round	9.7 (29.6)	8.5 (27.9)	12.1 (32.7)	-3.6***
Number of observations	2,112	1,412	700	

Note: The table presents summary statistics for the 2142 study households interviewed. Columns (1), (2) and (3) present sample means and standard deviations (in parentheses) for households in the full sample, the treatment group and the comparison group, respectively. Column (4) reports the difference in group means with stars indicating the result of the t-

test for the comparison of means. Significance stars: * $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$.

Finding 16

Table 51. Gender disaggregated results for use of and diversification in financial services

	Full sample	Male	Female	Difference
% of households with a bank account in a formal bank	18.4 (38.8)	16.5 (37.1)	22.3 (41.6)	-5.8***
Total number of financial services used by household	1.2 (1.2)	1.2 (1.2)	1.1 (1.2)	0.1**
Number of observations	2,112	1,412	700	

Note: The table presents summary statistics for the 2142 study households interviewed. Columns (1), (2) and (3) present sample means and standard deviations (in parentheses) for households in the full sample, the treatment group and the comparison group, respectively. Column (4) reports the difference in group means with stars indicating the result of the t-test for the comparison of means. Significance stars: * $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$.

Finding 19

Table 52. Gender disaggregated results for livestock sales and offtake

	Full sample	Male	Female	Difference
% of households that would use the payout for livestock activities	45.4 (49.8)	47.5 (50.0)	41.1 (49.2)	6.4***
Total number of offtakes excl. sale	0.6 (9.8)	0.6 (10.7)	0.6 (7.7)	0.0
Total value of offtakes of cow in last year	1,799.2 (26,705.3)	2,223.9 (32,466.5)	942.5 (4,995.7)	1,281.4
Number of livestock sold in last year	8.7 (205.2)	11.8 (251.0)	2.5 (2.9)	9.3
Total value of livestock sales in last year	44,667.5 (1,045,375.9)	55,945.5 (1,278,225.8)	21,918.1 (37,889.0)	34,027.4
Number of observations	2,112	1,412	700	

Note: The table presents summary statistics for the 2142 study households interviewed. Columns (1), (2) and (3) present sample means and standard deviations (in parentheses) for households in the full sample, the treatment group and the comparison group, respectively. Column (4) reports the difference in group means with stars indicating the result of the t-test for the comparison of means. Significance stars: * $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$.

Finding 20

Table 53. Differences in livestock losses in the last year in sample

(1) Full sample	(2) Treatment	(3) Comparison	(4) Difference
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Number of cows lost in 2023-24	1.6 (3.5)	1.9 (4.5)	1.3 (1.8)	0.6 ^{***}
Number of camels lost in 2023-24	0.6 (4.5)	0.9 (6.2)	0.3 (1.4)	0.6 ^{***}
Number of shoats lost in 2023-24	5.1 (11.7)	6.1 (14.8)	4.1 (7.2)	2.0 ^{***}
Number of observations	2,142	1,075	1,067	

Note: The table presents summary statistics for the 2142 study households interviewed. Columns (1), (2) and (3) present sample means and standard deviations (in parentheses) for households in the full sample, the treatment group and the comparison group, respectively. Column (4) reports the difference in group means with stars indicating the result of the t-test for the comparison of means. Significance stars: * $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$.

Table 54. Reported reasons for livestock losses (Cow) in sample

	(1) Full sample	(2) Treatment	(3) Comparison	(4) Difference
Death due to drought	83.3 (37.3)	84.6 (36.2)	82.0 (38.5)	2.6
Death due to disease or accident	54.9 (49.8)	52.8 (50.0)	57.0 (49.5)	-4.3
Death due to predation	5.5 (22.9)	5.7 (23.3)	5.3 (22.5)	0.4
Death due to raiding/conflict	1.4 (11.9)	1.6 (12.6)	1.2 (11.1)	0.4
Death due to premature birth	1.7 (12.9)	2.3 (15.1)	1.1 (10.3)	1.3
Death due to old age	8.9 (28.4)	8.6 (28.1)	9.1 (28.8)	-0.5
Death due to excessive rain	3.8 (19.0)	3.8 (19.1)	3.7 (19.0)	0.0
Just got lost	1.3 (11.5)	0.9 (9.4)	1.8 (13.2)	-0.9
Reason for loss: stolen	0.1 (3.0)	0.0 (0.0)	0.2 (4.2)	-0.2
Other	0.7 (8.4)	0.9 (9.4)	0.5 (7.3)	0.4
Number of observations	1,118	557	561	

Note: The table presents summary statistics for the 2142 study households interviewed. Columns (1), (2) and (3) present sample means and standard deviations (in parentheses) for households in the full sample, the treatment group and the comparison group, respectively. Column (4) reports the difference in group means with stars indicating the result of the t-test for the comparison of means. Significance stars: * $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$.

Table 55. Reported reasons for livestock losses (Camel) in sample

	(1) Full sample	(2) Treatment	(3) Comparison	(4) Difference
Death due to drought	80.1 (40.0)	84.9 (35.9)	73.6 (44.3)	11.4 ^{**}
Death due to disease or accident	55.5 (49.8)	59.7 (49.2)	50.0 (50.2)	9.7 [*]

Death due to predation	5.8 (23.5)	7.0 (25.6)	4.3 (20.3)	2.7
Death due to raiding/conflict	1.5 (12.3)	0.5 (7.3)	2.9 (16.7)	-2.3*
Death due to premature birth	0.3 (5.5)	0.5 (7.3)	0.0 (0.0)	0.5
Death due to old age	9.5 (29.4)	9.1 (28.9)	10.0 (30.1)	-0.9
Death due to excessive rain	0.3 (5.5)	0.5 (7.3)	0.0 (0.0)	0.5
Just got lost	2.1 (14.5)	1.6 (12.6)	2.9 (16.7)	-1.2
Stolen	1.2 (11.0)	0.5 (7.3)	2.1 (14.5)	-1.6
Other	4.3 (20.3)	3.8 (19.1)	5.0 (21.9)	-1.2
Number of observations	326	186	140	

Note: The table presents summary statistics for the 2142 study households interviewed. Columns (1), (2) and (3) present sample means and standard deviations (in parentheses) for households in the full sample, the treatment group and the comparison group, respectively. Column (4) reports the difference in group means with stars indicating the result of the t-test for the comparison of means. Significance stars: * $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$.

Table 56. Reported reasons for livestock losses (Shoats) in sample

	(1) Full sample	(2) Treatment	(3) Comparison	(4) Difference
Death due to drought	80.2 (39.8)	80.2 (39.9)	80.2 (39.8)	-0.0
Death due to disease or accident	59.6 (49.1)	56.8 (49.6)	62.6 (48.4)	-5.8**
Death due to predation	5.7 (23.1)	7.1 (25.7)	4.2 (20.1)	2.9**
Death due to raiding/conflict	4.3 (20.2)	6.2 (24.2)	2.2 (14.8)	4.0***
Death due to premature birth	2.1 (14.2)	2.9 (16.8)	1.2 (10.9)	1.7**
Death due to old age	10.7 (31.0)	13.0 (33.7)	8.4 (27.7)	4.6***
Death due to excessive rain	6.0 (23.7)	5.6 (23.1)	6.3 (24.3)	-0.7
Just got lost	5.4 (22.7)	6.9 (25.4)	3.9 (19.4)	3.0**
Stolen	1.4 (11.7)	1.7 (13.1)	1.0 (10.2)	0.7
Other	1.7 (12.9)	1.4 (11.9)	1.9 (13.8)	-0.5
Number of observations	1,360	692	668	

Note: The table presents summary statistics for the 2142 study households interviewed. Columns (1), (2) and (3) present sample means and standard deviations (in parentheses) for households in the full sample, the treatment group and the comparison group, respectively. Column (4) reports the difference in group means with stars indicating the result of the t-test for the comparison of means. Significance stars: * $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$.

Table 57. Reported timing of losses in livestock (Cows) in sample

	(1) Full sample	(2) Treatment	(3) Comparison	(4) Difference
January 2023	0.2 (0.4)	0.2 (0.4)	0.2 (0.4)	-0.0
February 2023	0.3 (0.4)	0.2 (0.4)	0.3 (0.5)	-0.1**
March 2023	0.4 (0.5)	0.3 (0.5)	0.4 (0.5)	-0.1**
April 2023	0.2 (0.4)	0.2 (0.4)	0.2 (0.4)	0.0
May 2023	0.1 (0.3)	0.1 (0.3)	0.1 (0.3)	0.0
June 2023	0.1 (0.3)	0.1 (0.3)	0.1 (0.3)	0.0**
July 2023	0.1 (0.3)	0.1 (0.3)	0.0 (0.2)	0.1***
August 2023	0.1 (0.3)	0.1 (0.3)	0.1 (0.3)	0.0**
September 2023	0.1 (0.3)	0.1 (0.3)	0.1 (0.3)	0.0
October 2023	0.1 (0.3)	0.1 (0.3)	0.1 (0.3)	-0.0
November 2023	0.1 (0.3)	0.1 (0.3)	0.1 (0.3)	0.0***
December 2023	0.0 (0.2)	0.0 (0.2)	0.0 (0.2)	-0.0
Number of observations	1,118	557	561	

Note: The table presents summary statistics for the 2142 study households interviewed. Columns (1), (2) and (3) present sample means and standard deviations (in parentheses) for households in the full sample, the treatment group and the comparison group, respectively. Column (4) reports the difference in group means with stars indicating the result of the t-test for the comparison of means. Significance stars: * $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$.

Table 58. Reported timing of losses in livestock (Camel) in sample

	(1) Full sample	(2) Treatment	(3) Comparison	(4) Difference
January 2023	0.3 (0.4)	0.2 (0.4)	0.3 (0.4)	-0.0
February 2023	0.3 (0.5)	0.3 (0.5)	0.3 (0.4)	0.0
March 2023	0.4 (0.5)	0.3 (0.5)	0.4 (0.5)	-0.1*
April 2023	0.2 (0.4)	0.2 (0.4)	0.2 (0.4)	-0.0
May 2023	0.1 (0.3)	0.1 (0.3)	0.1 (0.2)	0.1*
June 2023	0.1	0.1	0.0	0.0

	(0.3)	(0.3)	(0.2)	
July 2023	0.1 (0.3)	0.1 (0.3)	0.1 (0.2)	0.1**
August 2023	0.1 (0.3)	0.1 (0.3)	0.0 (0.2)	0.1**
September 2023	0.1 (0.3)	0.1 (0.3)	0.1 (0.2)	0.1*
October 2023	0.1 (0.3)	0.1 (0.3)	0.0 (0.2)	0.1**
November 2023	0.1 (0.3)	0.1 (0.3)	0.1 (0.2)	0.0
December 2023	0.0 (0.2)	0.0 (0.2)	0.0 (0.2)	0.0
Number of observations	326	186	140	

Note: The table presents summary statistics for the 2142 study households interviewed. Columns (1), (2) and (3) present sample means and standard deviations (in parentheses) for households in the full sample, the treatment group and the comparison group, respectively. Column (4) reports the difference in group means with stars indicating the result of the t-test for the comparison of means. Significance stars: * $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$.

Table 59. Reported timing of losses in livestock (Shoats) in sample

	(1) Full sample	(2) Treatment	(3) Comparison	(4) Difference
January 2023	0.2 (0.4)	0.2 (0.4)	0.2 (0.4)	-0.0
February 2023	0.3 (0.5)	0.3 (0.4)	0.3 (0.5)	-0.0
March 2023	0.4 (0.5)	0.4 (0.5)	0.4 (0.5)	-0.0*
April 2023	0.2 (0.4)	0.2 (0.4)	0.2 (0.4)	-0.0
May 2023	0.1 (0.3)	0.1 (0.4)	0.1 (0.3)	0.0
June 2023	0.1 (0.3)	0.1 (0.3)	0.1 (0.3)	0.0
July 2023	0.1 (0.3)	0.1 (0.3)	0.1 (0.3)	0.0
August 2023	0.1 (0.3)	0.1 (0.3)	0.1 (0.3)	0.0*
September 2023	0.1 (0.4)	0.2 (0.4)	0.1 (0.3)	0.0
October 2023	0.1 (0.3)	0.1 (0.3)	0.1 (0.3)	0.0
November 2023	0.1 (0.3)	0.1 (0.3)	0.1 (0.3)	0.0**
December 2023	0.1 (0.2)	0.0 (0.2)	0.1 (0.2)	-0.0
Number of observations	1,360	692	668	

Note: The table presents summary statistics for the 2142 study households interviewed. Columns (1), (2) and (3) present sample means and standard deviations (in parentheses) for households in the full sample, the treatment group and the

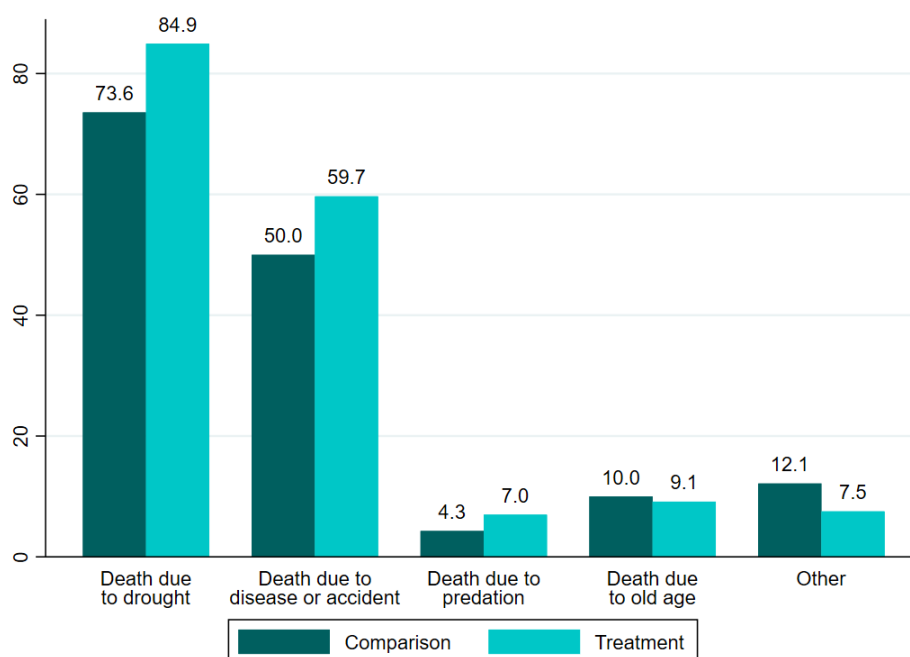
comparison group, respectively. Column (4) reports the difference in group means with stars indicating the result of the t-test for the comparison of means. Significance stars: * $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$.

Table 60. Livestock offtakes in sample

	(1) Full sample	(2) Treatment	(3) Comparison	(4) Difference
Number of cow take-offs excluding sell	4.6 (26.9)	4.5 (26.9)	4.8 (26.8)	-0.3
Number of camel take-offs excluding sell	1.5 (18.3)	1.0 (15.2)	2.0 (20.9)	-0.9
Number of shoat take-offs excluding sell	54.8 (970.9)	82.4 (1,367.0)	27.0 (94.4)	55.4
Number of observations	2,142	1,075	1,067	

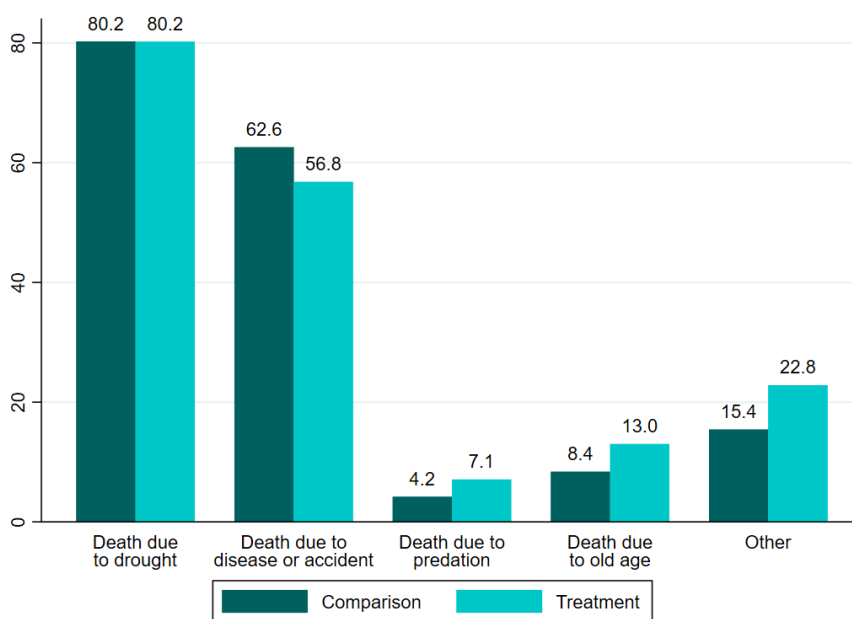
Note: The table presents summary statistics for the 2142 study households interviewed. Columns (1), (2) and (3) present sample means and standard deviations (in parentheses) for households in the full sample, the treatment group and the comparison group, respectively. Column (4) reports the difference in group means with stars indicating the result of the t-test for the comparison of means. Significance stars: * $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$.

Figure 18. Share of households reporting reasons for camel offtake



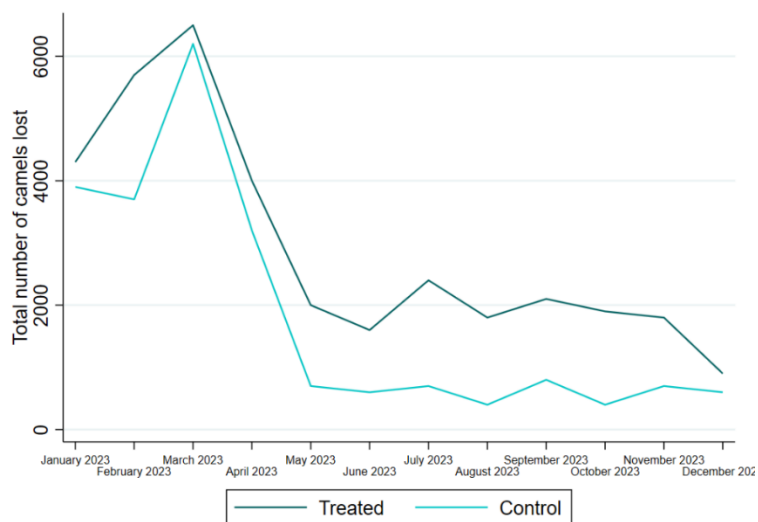
Source: Own elaboration based on endline household survey

Figure 19. Share of households reporting reasons for shoats offtake



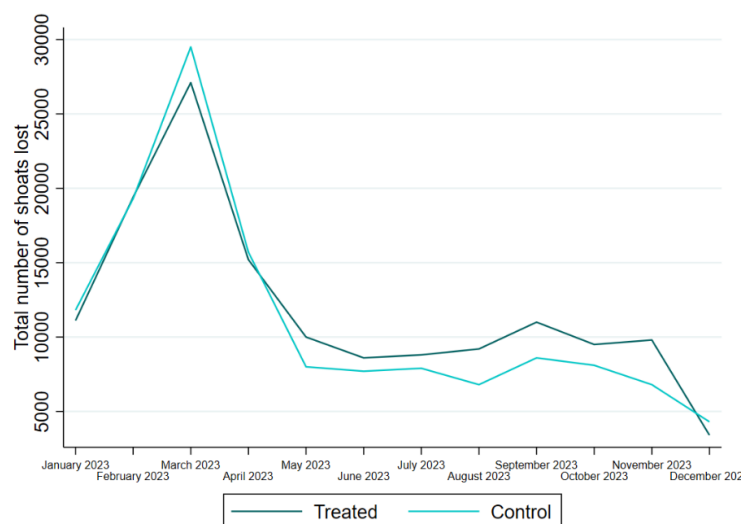
Source: Own elaboration based on endline household survey

Figure 20. Total number of camels lost in last year in sample



Source: Own elaboration based on endline household survey

Figure 21. Total number of shoats lost in last year in sample



Source: Own elaboration based on endline household survey

Finding 22

Table 61. Gender disaggregated results for food security

	Full sample	Male	Female	Difference
Household Food Insecurity Access Score	7.6 (5.9)	7.4 (5.9)	8.0 (6.1)	-0.7**
Household Food Insecurity Access category	3.1 (1.1)	3.0 (1.2)	3.1 (1.1)	-0.1**
Food Consumption Score	34.0 (18.1)	33.1 (18.9)	35.8 (16.2)	-2.7***
Number of observations	2,112	1,412	700	

Note: The table presents summary statistics for the 2142 study households interviewed. Columns (1), (2) and (3) present sample means and standard deviations (in parentheses) for households in the full sample, the treatment group and the comparison group, respectively. Column (4) reports the difference in group means with stars indicating the result of the t-test for the comparison of means. Significance stars: * $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$.

Findings 23 and 24

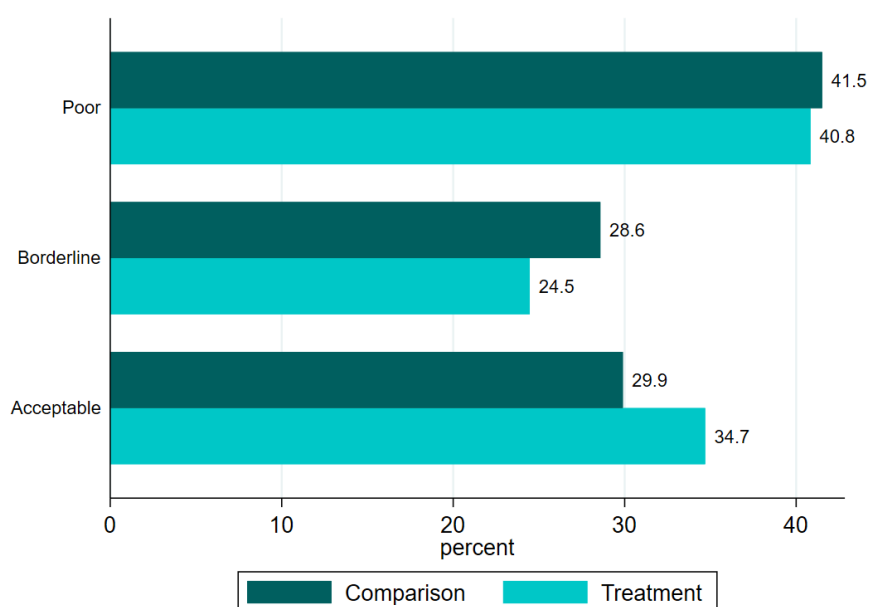
Table 62. Gender disaggregated results for dietary diversity and food consumption expenditure

	Full sample	Male	Female	Difference
Household Dietary Diversity Score (9 FCS categories and 7-day recall)	5.4 (2.2)	5.4 (2.3)	5.6 (2.0)	-0.2**

Household expenditure on food	5,636.5 (3,816.0)	5,847.6 (4,090.5)	5,210.6 (3,151.4)	637.0***
Share of food in total household expenditure	76.1 (17.1)	75.4 (17.0)	77.6 (17.1)	-2.2***
Number of observations	2,112	1,412	700	

Note: The table presents summary statistics for the 2142 study households interviewed. Columns (1), (2) and (3) present sample means and standard deviations (in parentheses) for households in the full sample, the treatment group and the comparison group, respectively. Column (4) reports the difference in group means with stars indicating the result of the t-test for the comparison of means. Significance stars: * $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$.

Figure 22. FCS Categorical (Borderline limit 28-48)



Source: Own elaboration based on endline household survey

Annex XIII. Acronyms and abbreviations

AfDB	Africa Development Bank
ATET	Average Treatment Effect on the Treated
BER	Basic Efficiency Resource
BoANRD	Bureau of Agriculture and Natural Resource Development
BoLPD	Bureau of Livestock and Pastoralists Development
C4ED	Center for Evaluation and Development
CAHWs	Community-based animal health workers
CBDRM	Community-based Drought Risk Management
CRGE	Ethiopia's Climate Resilient Green Economy
DAC	Development Assistance Committee
DEQAS	Decentralised Evaluation Quality Assurance System
DRR	Disaster and Risk Reduction
EQ	Evaluation Question(s)
ETB	Ethiopia Birr
FCS	Food Consumption Score
FGD	Focused Group Discussion
GoE	Government of Ethiopia
HDDS	Household Dietary Diversity Score
HDP	Human Development and Peace (actors)
HFIAS	Household Food Insecurity Access Score
IDI	In-depth Interview
IFAD	International Fund for Agricultural Development
IFW	Insurance for Work
ILRI	International Livestock Research Institute
IPWRA	Inverse Probability Weighting with Regression Adjustment
MoA	Ministry of Agriculture
KII	Key Informants Interview
NGO	Non-Governmental organization
OECD	Organization for Economic Cooperation and Development
PAP	Pastoralists and Agro-Pastoralists
PPP	Public Private Partnership
PSNP	Productive Safety Net Programme
rCSI	Reduced Consumption Strategies Index
ROSCAs	Rotating Savings and Credit Associations
SDG	Sustainable Development Goal
SIPE	Satellite Index Insurance for Pastoralists in Ethiopia

SMF	Somali Microfinance
SNNP	Southern Nations, Nationalities, and People
TLU	Tropical Livestock unit
ToC	Theory of Change
UNEG	United Nations Evaluation Group
UNICEF	The United Nations Children's Fund
USAID	United States Agency for International Development
USD	United States Dollar
VESAs	Village Economic and Social Associations
VfM	Value for Money
VSLAs	Village Savings and Loan Associations
WB	World Bank
WFP	World Food Programme

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