

COMPARATIVE STUDY ON THE AGRARIAN RURAL HOUSEHOLD ECONOMY- 2023

Research Report Submitted to



25 JUNE 2024

Authors: Peter T. Jacobs, Vandudzai Mbanda, Siwaphiwe Bala, Sisonke Mtyapi, Nolukholo Mabharwana,
Jamie-Lee Mckay, Kukhanyile Mali, Mokgethwa Madubye, Matume Maila

Contact: Equitable Education and Economics, Human Sciences Research Council, Private Bag X41,
Pretoria, 0001

Corresponding co-author- email: pjacobs@hsrc.ac.za; tel: 021 466 7849

Table of Contents

Researchers' note and acknowledgements	vi
Abbreviations and acronyms	vii
Executive Summary	viii
1. INTRODUCTION	1
1.1 Introduction.....	1
1.2 Problem statement and research questions.....	2
1.3 Purpose and research objectives	3
1.2. Drawing on the insights of the 2012 ARHE Report and Land Policy in South Africa	4
1.3 Structure of the report	7
2. METHODOLOGY	9
2.1 Introduction.....	9
2.2 Literature and documentary reviews.....	9
2.3 Key Informant Interviews (KIIs)	9
2.4 Survey of smallholder and farm worker households.....	12
2.5 Conclusion	20
3. AGRARIAN HOUSEHOLD DYNAMICS IN PERSPECTIVE: SELECTIVE REVIEW OF GLOBAL SOUTH EXPERIENCES.....	21
3.1 Introduction.....	21
3.2 Rural demography living standards	22
3.3 Farmland ownership, access and use	26
3.4 Farm workers and farm dwellers	33
3.5 Food and nutrition questions.....	39
3.6 Synthesis of key insights.....	44
4. FINDINGS: INSIGHTS FROM KEY INFORMANT INTERVIEWS.....	46
4.1 Introduction.....	46
4.2 Agrarian rural household economy: Key informants' understanding	46
4.3. Living conditions of rural people.....	47
4.4. Access to resources and food and nutritional security (FNS)	57
4.5 Policy environment	61
4.6 Effects of shocks on livelihoods of agrarian households	73
4.7 Conclusion	89
5. FINDINGS: ANALYSIS BASED ON SURVEYED AGRARIAN HOUSEHOLDS.....	91
5.1 Introduction.....	91
5.2 Agrarian households and demographics	91
5.3 Smallholder and subsistence farmers farming activity	114
5.4 Farm workers and their employment conditions.....	135
5.5 The effects of climate dynamics and Covid-19 on agrarian households.....	143
6. CONCLUSION AND RECOMMENDATIONS	152
6.1 Conclusion	152
6.2 Recommendations.....	155
REFERENCE LIST	158
ANNEXURES	169
ANNEXURE A: DISTRICT MAP LOCATION - Integrated Maps of 12 Districts	169
ANNEXURE B: DECADAL BACKGROUND FOR 2023 AGRARIAN HOUSEHOLD STUDY....	171
ANNEXURE C: SELECTIVE SAMPLE HEADCOUNT INFORMATION.....	178

List of Figures

Figure 5.1: Self-reported age distribution of female-headed agrarian households by agrarian activity, 2023	94
Figure 5.2: Self-reported Age distribution of male-headed agrarian households by agrarian activity, 2023	95
Figure 5.3: Self-reported educational attainment of female-headed households by agrarian activity, 2023	96
Figure 5.4: Self-reported educational attainment of male-headed households by agrarian activity, 2023	97
Figure 5.5: Total and per capita average household income per month for female-headed households, 2023	102
Figure 5.6: Total and per capita average household income per month for male-headed households, 2023	103
Figure 5.7: Average per capita monthly income of agrarian households by quintile, 2023	104
Figure 5.8: Average per capita food expenditure of agrarian household by quintile, 2023	105
Figure 5.9: Monthly share (%) of different food expenditures of farmers, 2023	106
Figure 5.10: Monthly share (%) of different food expenditures of farm workers, 2023	107
Figure 5.11: Monthly share (%) of different food expenditures of farm dwellers, 2023	109
Figure 5.12: Total non-food household share of expenditure per month, 2023	110
Figure 5.13: Primary source of drinking water of female households, 2023	111
Figure 5.14: Primary source of drinking water of male households, 2023	112
Figure 5.15: Self-reported Primary source of energy that female households use, 2023	113
Figure 5.16: Self-reported Primary source of energy that male households use, 2023	113
Figure 5.18: Main source of drinking water for crop farmers, 2023	132
Figure 5.19: Experience with government training and extension advice for farmers, 2023	132
Figure 5.20: Experience with access to agricultural production, support and market information for farmers, 2023	133
Figure 5.21: Experience with land reform and agricultural support grants, subsidies and loans from government, 2023	134
Figure 5.22: Experience with NGO and CSO support	134
Figure 5.23: Age distribution of farm workers by job contract type, 2023	138

List of tables

Table 2.1: Key Informant Interviews (KIIs) conducted among the target groups from each province, 2023	10
Table 2.2: Districts breakdown of targeted and realised respondent sample sizes before data cleaning, 2023	16
Table 2.3: Realised sample by targeted district and respective local municipality post data cleaning, 2023	16
Table 5.1: Realised sample of agrarian households interviewed – according to district municipality, 2023	92
Table 5.2: Total size, composition and employment status of agrarian households, 2023.....	93
Table 5.3: Summary of the self-reported share of AHs with membership in different organisations and associations, 2023	98
Table 5.4: Self-reported monthly income for female and male-headed households, 2023	99
Table 5.5: Source of average monthly income for female and male-headed households, 2023	100
Table 5.6: All self-reported household income per month for female and male-headed farm dwellers households, 2023.....	101
Table 5.7: Overall Self-reported share (%) of interviewed farmers from district municipalities, 2023....	115
Table 5.8: Overall share (%) of farming activity among female and male farmers. 2023	116
Table 5.9: Main purpose of farming activity (crop, livestock, mixed) among farmers, 2023.....	117
Table 5.10: Self-Reported Share (%) of Main Farming Location by District Municipality, 2023.....	118
Table 5.11: Female and male main farming location by farming type, 2023.....	119
Table 5.12: Land tenure arrangement among crop farmers; by land holding rights/basis for land access, 2023	119
Table 5.13: Land Tenure arrangement among Livestock Farmers and Land Holding Rights/Basis for Land Access, 2023	120
Table 5.14: land size farmers used for farming in last farming seasons - 2023, by district	120
Table 5.15: Overall agrarian farming household income of crop and livestock farmers, 2023	121
Table 5.16: Overall agrarian farming household income of mixed farmers, 2023	122
Table 5.17: On-farm labour inputs of crop farmers, 2023	122
Table 5.18: On-farm labour inputs of livestock farmers, 2023	123
Table 5.19: On-farm labour inputs of mixed farmers, 2023	124
Table 5.20: Self-reported farm input costs in 2023 agricultural season, 2023	125
Table 5.21: Main input suppliers that farmers used (livestock farming), 2023.....	125
Table 5.22: main input suppliers that farmers used [farm input=pesticides, etc.], 2023.....	126
Table 5.23: Main input suppliers that farmers used, 2023	126
Table 5.24: Main input suppliers that farmers used for animal medication, vaccines etc., 2023.....	127
Table 5.25: Main input suppliers that farmers used [farm input=animal feed, fodder, etc.], 2023	128
Table 5.26: self-reported farm input costs in 2023 agricultural season, crop farmers.	128
Table 5.27: self-reported farm input costs in the 2023 agriculture season, livestock farmers, 2023	129
Table 5.28: Self-reported farm input costs in the 2023 agricultural season, mixed farmers	129
Table 5.29: Total number of self-reported consumption of all farmers, 2023.....	130
Table 5.30: Share (%) of the district distribution of farm workers by contract type, 2023.....	136
Table 5.31: The gender distribution of farm workers by job contract type, 2023	137
Table 5.32: Duration (years) of farm work and on farm stay for both female and male household heads, 2023	138
Table 5.33: Dwelling location of both female and male farm workers, 2023	139
Table 5.34: Share (%) of how frequently female and male farm workers receive their wages, 2023.....	139
Table 5.35: Share (%) of non-wage benefits that female and male farm worker received, 2023	140
Table 5.36: Share (%) of housing payment arrangement for on farm living for farm workers, 2023.....	141

Table 5.38: Share (%) of the effects of the minimum wage policy on farm workers in relation to mandatory wage increases, 2023	141
Table 5.39: Share (%) of the effects of the minimum wage policy on farm workers in relation to labour rights	142
Table 5.37: Share (%) of farm worker evictions in the last 10 years, 2023	142
Table 5.40: Agrarian household's exposure to increased temperatures in last five years by districts (Share %), 2023	144
Table 5.41: Agrarian household's exposure to drought in the last five years by district, 2023	145
Table 5.42: Agrarian household's exposure to flooding and heavy rain in the last five years by district, 2023	146
Table 5.43: Agrarian household's exposure to radical change in rainfall patterns experiences in last five years, 2023	146
Table 5.44: Share (%) of negative effects experienced by female and male agrarian households due to extreme climatic events in the last five years, 2023	147
Table 5.45: Share percentage of the adaptation strategies employed by agrarian households due to climate change, 2023	148
Table 5.46: Share percentage of the barriers experienced by agrarian households to climate adaptation strategies, 2023	149
Table 5.47: Share percentage of the effect of Covid-19 on agrarian households, 2023	151

Researchers' note and acknowledgements

The completion of the 2023 Agrarian Rural Household Economy (ARHE) study report benefited from the contributions of many individuals and organisations. The dedicated leadership of the Tshintsha Amakhaya (TA) collective since the inception of this project cannot be overstated. Its leadership conceived the idea of a follow up inquiry into the livelihood status of agrarian households since 2011/12, secured funding for the research and guided the study team through a reference group. Without the managerial oversight and support of the TA coordinator, Ms Priscilla Mfaniseni Mdlalose, it would have been virtually impossible to execute this complex assignment. A special word of gratitude to all survey respondents and key informants for giving researchers time to record their experiences for this crucial inquiry. Navigating the burdens of fieldwork is never easy as the most experienced data collectors can attest. Against formidable odds, enumerators persevered to collect the best quality data possible and enabled us to learn from their 'observations on the ground' during the post-fieldwork reflection workshop. The Human Sciences Research Council (HSRC) IT team helped to fast-track the agrarian household survey through automating data collection on the REDCAP platform. Ms Shingi Muzondo, the HSRC subject librarian, was always on standby to solve the research team's information access requests. Detailed feedback from our editor substantially improved the clarity, coherence and analytical consistency of the narrative. The authors remain jointly responsible in case of any remaining errors.

Authors: Peter T. Jacobs, Vandudzai Mbanda, Siwaphiwe Bala, Sisonke Mtyapi, Nolukholo Mabharwana, Jamie-Lee Mckay, Kukhanyile Mali, Mokgethwa Madubye, Matume Maila

Abbreviations and acronyms

AFRA	Association for Rural Advancement Land Rights Advocacy
AH	Agrarian Household
ARHE	Agrarian Rural Household Economy
BRC	Border Rural Committee
CASP	Comprehensive Agricultural Support Programme
CBO	Community-Based Organisation
CfP	Call for Proposals
CSO	Civil Society Organisation
DAFF	Department of Agriculture, Forestry and Fisheries
ESTA	Extension of Security of Tenure Act
FNS	Food and Nutritional Security
FSG	Farmers Support Group
GAP	Good Agricultural Practices
GHS	General Household Survey
HSRC	Human Sciences Research Council
KII	Key Informant Interviews
LSLA	Large Scale Land Acquisitions
LSMS-ISA	Living Standards Measurement Study-Integrated Surveys on Agriculture
MST	Landless Workers Movement (Brazil)
NDP	National Development Plan
NGO	Non-Governmental Organisation
NPFNS	National Policy on Food and Nutritional Security
POPIA	Protection of Personal Information Act
PSWU	Private Sector Workers Union
QLFS	Quarterly Labour Force Surveys
SCLC	Support Centre for Land Change
SDG	Sustainable Development Goals
SPP	Surplus People's Project
Stats SA	Statistics South Africa
TA	Tshintsha Amakhaya
TCOE	Trust for Community Outreach and Education
ToR	Terms of Reference
UNDP	United Nations Development Programme
WFO	World Food Organization
WFP	Woman on Farms Project

Executive Summary

The main objective of the 2023 Agrarian Rural Household Economy (ARHE) study is to examine the lives and livelihoods of agrarian households in South Africa, including how they have changed over the past decade. In this study ‘agrarian households’ refers to three groups, namely i) small-scale farmers (referred to as ‘farmers’ throughout the report), ii) farm workers and iii) farm dwellers who work or live on the commercial farmland of others¹. The research focused on the living conditions, employment, agricultural production, and other livelihood activities of agrarian households, including their access to land, and security of tenure. The inquiry sought to identify factors that could improve the living conditions, mainly of women, and support self-organisation within rural communities. The research also sought to understand how land and agricultural policy reforms can enable food sovereignty and improve employment and economic opportunities, and how civil society activism can influence policy to uplift living standards within rural South Africa.

Tshintsha Amakhaya (TA), an agrarian rights advocacy alliance, commissioned the Human Sciences Research Council (HSRC) to conduct the 2023 research. As an activist alliance advocating for land reform, social justice and development of vulnerable and impoverished communities, the evidence-based findings and recommendations of this study are intended to inform TA’s advocacy for positive agrarian transformation. The information assembled in this 2023 research report followed a comparative approach. This was done to help TA assess the extent of transformation in the livelihoods and lives of rural households over the last 10 years (since the 2011/12 ARHE study) and streamline their advocacy to foster ecological and transformative agrarian livelihoods.

Methodology

The mixed methods approach used for the 2023 ARHE study combined a review of literature, key informant interviews and an extensive household survey. The qualitative analysis included 24 interviews with key informants including government officials, academics, experts in the field and TA affiliates. In addition, a thorough literature review was conducted to better understand the dynamics and changes in the lives and livelihoods of people in agrarian households. For the 2011/2012 survey, researchers interviewed 1735 households across 12 local municipalities in the Western Cape, Eastern Cape, KwaZulu-Natal and Limpopo. In the 2023 survey, 1297 households from 12 study districts across all provinces of South Africa were interviewed. Due to these additional districts, and the impossibility of replicating the 2011/2012 sample,

¹ Large scale (still largely White-dominated) commercial farmers are well captured in existing research and were not the focus of the research.

the comparison between the 2011/2012 and the 2023 study is limited, though details are included where possible.

Demographics

In both 2011/2012 and 2023 surveys, the average household size was similar (four people). In 2023, with the added dimension of gender, the survey showed that the average size of female-headed households was slightly larger compared to male-headed households. Of the 1297 households surveyed in 2023, 66% were headed by farmers, 26% by farm workers and 8% by farm dwellers. As shown in Figure 1, slightly more females headed farmer households. Among farm dweller households, significantly more females were heads, while there were higher numbers of male-headed farm worker households.

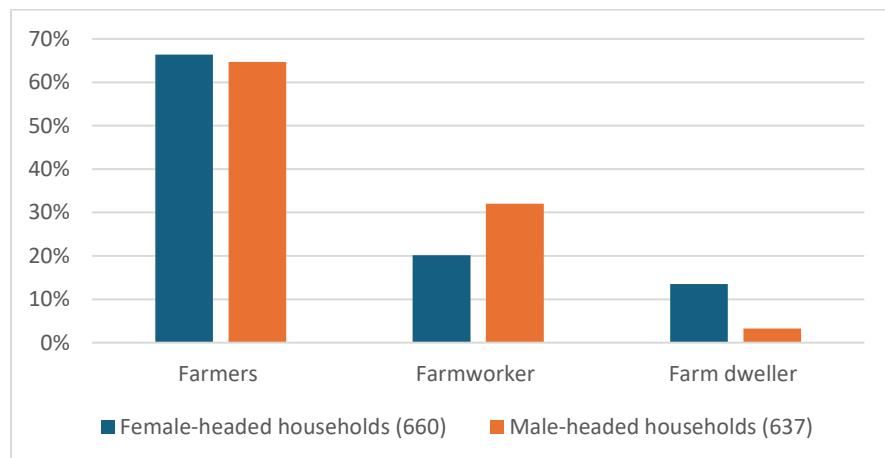


Figure 1: Proportion of male-headed and female-headed households across household types

Access to land

The size of land for crop farming increased from two hectares in the 2011/2012 study to 2.31 hectares in the 2023 survey. Disaggregated by gender, the 2023 data indicated that the average size of land used by female-headed farmer households (2.13 hectares) for crop farming was smaller than for male-headed farmer households (2.81 hectares). A similar pattern emerged in livestock farming with female headed households (151.12 hectares) using less land than male headed households (236.83 hectares) While both genders predominantly acquire land through permission from traditional authorities (i.e. the Chieftaincy, in the communal areas of the former homelands), males hold larger pieces of land and own a greater share of land with title deeds relative to females.

Effects of shocks on agrarian households

Insights from the survey and key informant interviews highlighted how rural livelihoods are affected by adverse climate related events such as drought, cold spells, floods, erratic rainfall patterns and extreme heat

(which sometimes causes wildfires). The adverse effects of extreme climate events acutely affect farmer households and appear to be compounded for vulnerable groups such as the poor and females. Moreover, the effects varied across the 12 districts studied.

Most of the surveyed farmer household heads reported that they have not implemented adaptation strategies, with fewer male farmer household heads engaging in any strategy than female farmer household heads. A lack of government support, information and capital were indicated as barriers to implementing adaptation strategies, with most farmers citing a lack of government support as the main a problem.

Quality of life outcomes for agrarian rural households

Sources of income of agrarian rural households

The 2011/2012 survey found wages the primary income source for agrarian households, followed by social grants (i.e. welfare transfers), while own-business and farming contributed the least to household income. In the 2023 survey, the main income source for households were social grants, followed by wage income. Almost all households self-reported reliance on mixed livelihoods even when farming and own-business incomes contributed most to farming household incomes. For farm worker households, wages were the largest source of income. Across household categories, excluding farmer households, farming was not a source of income for the majority. However, farmer-headed households had the highest average total income (R14538.34), followed by households headed by farm workers (R4401.42) and farm dwellers (R4118.84). The data showed that the income of agrarian households depends heavily on their primary activity, i.e. farmers receive their highest average income from farming / own-business, whereas farm workers and farm dwellers derived most of their income from wages. The average total income of households headed by female farm workers and farm dwellers was higher than those of males in these categories. However, female headed farmer households' total average income was lower than male headed farmer households by nearly 50%.

Employment status

In the 2011/2012 study, 24% of members in surveyed households were unemployed, with higher levels of unemployment among females (28%) compared to males (19%). This pattern holds true for the 2023 survey, as demonstrated in Figure 2 with unemployment at 31% for females, and 21% for males, and rates of unemployment higher for both genders in female headed households. In addition, data from the 2023 survey indicates that female headed households have a slightly larger proportion of children (43%) than male headed households (39%), thus with lower rates of employment, and bigger household size, females have more people to support with lower rates of employment.

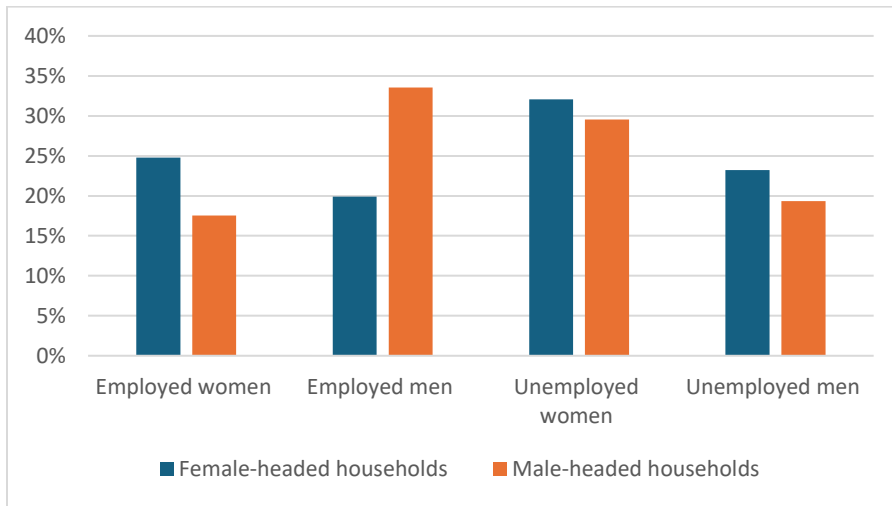


Figure 2: Employment status in male-headed and female-headed households

Farm workers and their employment conditions

The ARHE surveys sought to capture the distinctions between permanent and non-permanent contracts, trying to establish the security of labour, whether long term, or casual/day labour practices were more prevalent. A significant shift toward precarity emerged as a feature, with 94% of the surveyed farm workers reporting non-permanent contracts in 2023 compared to the 2011/2012 findings when 78% of interviewed farm workers had a permanent employment contract and 5% had contracts through labour brokers. However, in the 2011/2012 study, data on farm workers came from only two districts, and in 2023, from 12, which means that it is difficult to draw concrete comparisons.

Food and nutrition security

The income and food expenditure patterns of the 2023 survey showed that most households did not have enough money to buy enough nutritious food. In more than 60% households, food expenditure was at a level below the food poverty line, suggesting that the average household sampled in 2023 lives in extreme poverty. The 2011/2012 study found that average expenditure by agrarian households was around the poverty line, indicating that these households have become worse off over the past decade. In addition, the 2023 study found the composition of the food basket of agrarian households is not nutritionally sufficient. Poorer households consumed more processed foods, cereal starch/cereal and take-aways, which did not always have adequate nutrients. Although households may consume food they produce or purchase, instances of hidden hunger become prevalent when the quality of food consumed does not meet minimum nutritional requirements.

Female-headed households dedicated a larger share of their expenditure to food, including higher spending on fruits and vegetables than male headed households (except in farmer households). This could mean higher levels of nutritional literacy among females compared to males.

Conclusions

Based on this study's findings, there have been some positive changes in living conditions, particularly in terms of land access and agricultural support, over the past 10 years. However, significant challenges persist, particularly regarding the inclusion of women in economic activities, access to resources, and resilience to climate shocks. In addition, the quality of life of agrarian households has regressed over the past decade, when comparing the findings of the 2011/2012 and 2023 studies. Households rely more on social grants than they did 10 years ago, and levels of unemployment among the surveyed households have worsened. The working conditions of farm workers are worse, particularly in terms of permanent employment contracts as almost all the farm workers in the 2023 survey did not have permanent contracts. All these challenges are underscored by the key finding that more people were in extreme poverty in the 2023 survey compared to the 2011/2012 survey. Taken together, these findings highlight that the living conditions of rural communities have regressed over the past 10 years.

Recommendations

The findings from the 2023 agrarian households offer the TA collective an agenda for activism to help achieve the livelihood aspirations of small-scale farmers, farm workers and farm dwellers. Broad recommendations linked to each study objective sum up the proposed activist agenda. A crucial next step is for TA affiliates to reflect on this overarching agenda for pro-poor agrarian activism and tailor each recommendation into action plans to guide day-to-day grassroots practice. The following recommendations are proposed to address the identified issues and further enhance the livelihoods of agrarian rural households.

Key recommendations

- Intensify advocacy and mobilisation for progressive change in farmland tenure security.
- Encourage and strengthen use of ecologically sustainable farming activities.
- Implement training programmes and workshops to enhance farming capabilities for ecological and transformative agrarian livelihoods.
- Empower the agency and amplify the voices, needs and interests of marginalised women in the agrarian sector.

- Design and implement campaigns to ensure that ecological and transformative agrarian progress directly benefit resource-poor small farmers, farm workers and other vulnerable rural dwellers.
- Lobby the state to enforce and implement all labour rights laws, farmland redistribution policies, appropriate social protection and equitable food value chain restructuring.
- Construct resilient networks with critical stakeholders in the agrarian sector for shared, integrated and well-coordinated interventions that benefit marginalised agrarian populations.
- Scale up investment in the production, uptake, dissemination and use of knowledge and evidence in aid of higher-frequency outreach, advocacy and mobilisation.

1. INTRODUCTION

1.1 Introduction

Tshintsha Amakhaya (TA) is a national, feminist-led social movement advocating for the land rights of economically, socially, and politically marginalised rural and urban poor communities. Formed in 2010, TA is an activist collective of community-based organisations (CBOs), non-governmental organisations (NGOs), and grassroots formations that mobilises, empowers, and amplifies the voices of the rural marginalised. With affiliates in five of the nine provinces in South Africa, TA advocates at a national level for rural communities to achieve their land and agrarian aspirations, seeking to influence land and agrarian policies to the benefit of the rural marginalised. This research project was completed by the Human Sciences Research Council (HSRC) responding to a Call for Proposals (CfP) from the alliance, which aimed to revisit, update and expand its 2011/2012 Agrarian Rural Household Economy (ARHE) survey and research report. The 2023 survey also aimed to collect data to compare to the 2011/2012 report, in order to track changes in agrarian rural households over the last decade.

Since 2011, the rural context in which TA is active has been a terrain of change and contestation. The data collection for the 2011/2012 ARHE report was localised and took place from October 2010 to May 2011, in the after-effect of the Great Global Recession and food disaster which took place between 2007-2009. Localisation in this instance refers to a setup in which provincial affiliates decentralised information collection with a view on elevating context-specific land and agrarian livelihoods. The follow up study was designed to draw from lessons learned from this decentralised approach, while considering feasible ways to also conduct the study in five new districts that were preselected and prioritised by TA. This geographic expansion is a significant change and demanded that the research team reflected, at the outset, what this change meant for the methodology and how it could be operationalised in practice.

The comparative approach stipulated in the CfP/Terms of Reference (ToR) centred on the extent to which the lived realities of rural communities display evidence of change. Have these core constituencies - including farmers, farm dwellers and farm workers – experienced improvement or deterioration in the ways in which they have been making a living since 2011/2012? In more than 10 years since the baseline TA agrarian household survey, there have been numerous policy shifts and livelihood dynamics which have played out in South Africa's uneven rural landscape. Changes in land redistribution, restitution, and tenure and agricultural development support to South Africa's traditional strands of land and agrarian reforms have been fragmented and peripheral. For example, the implementation of the one-household one-hectare model has yielded mixed results, whilst land expropriation debates have been stuck in political and economic

populism. The Covid-19 pandemic and related restrictions exposed deep agrarian inequalities, including quality of life crises like hunger, despite the adoption and operationalisation of a National Policy on Food and Nutrition Security (NPFNS) in 2014. Social protests and mobilisation for livelihood sustainability, such as the 2012 Breede River Valley farm worker rebellion overlapped with other disjointed and sporadic campaigns for land, food and better employment conditions for farm workers.

1.2 Problem statement and research questions

Socioeconomic rights such as water, food and land are universal human rights which are protected in South Africa's Bill of Rights. As an activist collective, the mission of TA is to safeguard and to improve the socioeconomic rights of rural constituencies, including household farmers, resource-poor smallholder farmers, farm workers and farm dwellers. However, weak policies, state failures, policy implementation breakdowns, the limitations of civil society activism, ecological disasters and socioeconomic crises often threaten, violate and undermine the rights of these rural residents. Advocacy for advancement of these rights demand reliable evidence and tools to monitor threats and other ways in which these rights can be undermined. Investment in tools to gather this kind of data remain lacklustre, with national household surveys not generating the data needed by TA affiliates. How can securing and realising the land, labour, food, ecological and shelter rights of rural communities be documented and monitored? How can customised tools assist to close the information gaps in support of TA activism?

This comparative study aims to assess the progress that has been made in the livelihoods of the marginalised rural communities from 2011 until today. The study focuses on various aspects such as (1) the type of progress that has been made in the livelihoods of the marginalised rural communities, (2) marginalised rural communities and the results of the Covid-19 pandemic and related restrictions had on them, and (3) the violation of the human rights of the marginalised rural communities. Among other issues, the information tools (an ARHE survey and KII questionnaire) address the following sets of questions:

- What kind of/type of changes can be traced in the lives of disadvantaged rural communities in line with the National Development Plan's (NDP) 2030 vision (National Planning Commission [NPC], 2011)? Has there been any recorded changes over the past decade in the lives of the marginalised rural communities? For example, do these vulnerable groups have access to the markets, land (including land ownership), better working conditions, agricultural support?
- What impact did the Covid-19 pandemic and related limitations have on the already marginalised rural communities? Have the Covid-19 related limitations worsened the economic disparities of the marginalised rural communities or not? For example, what was the impact on their incomes, production rate, and accessibility to markets?

- Over the past decade, how did these vulnerable communities deal with climate change? Have they adopted any climate change practices? If so, what kind of practices have they adopted?
- How has policy assisted these vulnerable communities over the last decade? Has the existing policy improved their lives? Have these vulnerable communities been involved in the development of new policies that are suitable for their needs?

1.3 Purpose and research objectives

The purpose of this research study is to establish if any improvements have occurred in the lives of marginalised rural communities. To achieve this purpose, this study will compare the results of the ARHE study done in 2011/2012 with the recent ARHE study which was conducted in 2023 where possible given the expanded number of research sites, and impossibility of replicating the 2011/2012 sample. The study aims to uncover the economic inequality of the already disadvantaged rural communities, particularly the results of shocks such as the Covid-19 disaster and disruptive climatic events. Factors which might greatly improve the living standard of rural people, especially women, will be looked into. Overall, the research study aims to grasp crucial institutional challenges which hinder economic progression amongst marginalised rural communities.

Study objectives

The research study plans to bring to light the economic inequalities of marginalised rural communities through collecting socio-economic, demographic, and other related data, drawing key areas of concern from the 2011/2012 ARHE study in order to compare (as far as possible) with the 2023 survey results in order to notice if there have been any developments in the lives of rural households over the last decade.

The main objective is divided into specific objectives:

- To establish if and where there has been progressive change over the last decade in admittance to land for production, and secure tenure for those who dwell on farms.
- To find out what support can be given to marginalised individuals residing in rural spaces who are eager, and in a position, to use the land efficaciously, and if provided with proper support can better their livelihoods
- To determine how much progress has been achieved to ensure that women and young people, in particular, participate actively in the economy.
- To understand the aspects which have contributed to improving the standard of living of rural people, largely women, and the benefits of self-organisation.
- To understand the role of agricultural production in addressing food sovereignty and job creation

- To find out what changes can be made to policy to make it more pro-poor, focusing on basic employment conditions of rural citizens, and.
- To establish how movements can play part in the development of a bottom-up approach to influence policy.

1.2. Drawing on the insights of the 2012 ARHE Report and Land Policy in South Africa

In this section, key insights from the 2011/2012 ARHE report are presented in order to situate the 2023 survey and report, demonstrating what was learned, and identify the knowledge gaps. These are vital both in terms of understanding the development of the survey instrument, as well as assisting in reading this final report. Just as important is the policy context, which is briefly sketched to assist in contextualising this report.

1.2.1 The 2011 Agrarian Rural Household Economy (ARHE) Report – Synthesis of insights

TA conducted a survey from the end of 2010 to early 2011 to understand issues on household income, livelihood strategies, access to public services, and factors contributing to vulnerability at a total of nine TA research sites across four provinces. The survey involved interviews with 1743 responded households (totalling 6987 household members) across 12 local municipalities in the Western Cape, Eastern Cape, KwaZulu-Natal and Limpopo. The survey was conducted on six land tenure types, namely communal lands, (farm dwellers on) commercial farmland, land reform farms, commonage, church land, and informal settlements/rural towns.

All TA partner organisations participated in developing questions that were asked in the survey, with the research team of each partner organisation meeting to design their questionnaire. Thus, while there was some basic standardisation of questionnaires, the partner organisations shaped respective questionnaires in accordance with their needs. For example, some modified their questionnaires from previous surveys in order to conduct a comparative study with work they had done earlier in different areas.

The 2011/2012 ARHE study focuses on the household as the unit of analysis. Stratified sampling was generally applied to select participants on the basis of gender, age, type of production (livestock, crop, back yard), and geographical spread (number of respondents from each farm, settlement or site). However, there were variations in sample selection across organisations as in some cases participants were selected only if they were already doing food production, and/or already involved in selected community organisations. In other cases, organisations focused on particular types of land tenure like smallholder farmers with access to land or on farm dwellers only.

TA acknowledged that this variation in the questionnaires later posed challenges in the construction of a TA database as variables were not the same across all organisations. The report explains that questions asked by some organisations were not included in the questionnaires of the other organisations or were asked differently, in a way that makes the questions quantitatively incompatible. TA noted that while the 2010/2011 ARHE survey provided a base of questions for a future survey, a lesson drawn from the experience is the importance of developing and agreeing on a common base of questions for all organisations. Organisations could then have been allowed to add questions to the common questionnaire if need be.

Each partner organisation produced its own different baseline reports from the survey, to guide its specific activities. The meta-analysis created from the different reports across the organisations provided an overall picture and highlighted the main overlap points that could inform TA's interventions as a network. TA understands that its individual partner organisations have different approaches in providing support that the partners can share as they learn from one another.

One key aspect the 2011//2012 ARHE survey intended to capture was gendered dynamics of land access and production. However, TA pointed out that because most of the questions were asked at the household level, the analysis could not be done at the individual gender differences in production and land access. TA added that even if questions had been asked to individuals in the household, results would still not have been adequate given that the household is the primary unit of economic activity. The problem, according to TA, was that the household has a shared pool of resources from individual contributions of its members, making analysis of individual gender differences in access to land and production difficult in a survey. This resulted in a failure to establish a baseline differentiating female and male access to land and agricultural production. This also had the implication that the report was unable to satisfactorily capture group production data which underplayed the potential role of group projects in contribution to income, food and assets.

The key finding of the study was that government and the private sector efforts of investing into building a black commercial smallholder sector, to feed into formal agri-food value chains, is likely to benefit only a small minority of producers. Evidence from the survey showed that the majority of marginalised producers remain excluded from the formal agri-food value chains. Only 2% of members of responding households reported agriculture as their primary source of income. TA argued that limited government support is

provided to smallholder black farmers, as government policies and programmes tend to focus on a few, big, high external input projects that are aimed at integrating into established formal markets.

1.2.2 Agrarian rural households in South African land policy

Agrarian households are at the heart of South Africa's land policy. The government's stated intention is to support agrarian households to help them secure long-term tenure and improve their productivity, while also stimulating economic growth and creating jobs for the wider economy. The Department of Agriculture, Forestry and Fisheries (DAFF), in the foreword to its 2010/11 Strategic Plan (2011), has usefully clarified its objectives by disaggregating the sector into 'subsistence,' 'smallholder' and 'commercial' farmers. This was followed by adoption of several policies to foster the productivity and expansion of agrarian households. South Africa's land policy envisages several changes to the way land is allocated and used as set out in the NDP (2011). The NDP and its Vision 2030 call for improved access of resource-poor farmers to land, water and institutional support, such as extension and advisory services, as means of supporting rural economies and alleviating poverty (Baiyegunhi et al., 2019).

Women and gender disparity also form part of the bigger discourse on land ownership and involvement in the agricultural sector (Department of Agriculture, Forestry and Fisheries [DAFF], 2017; Masiya & Mazenda, 2022). The Land Audit (2017) report revealed that women only own 18% of private land, dropping to 13% for farm and agricultural holdings. This failure to transform land ownership and gendered patterns is detrimental for women's economic freedom (Fynn & van Schalkwyk, 2022). The rights of women to use and control land is key to the lives of rural women in South Africa who depend on the land to feed themselves and their families and to derive an income (Fynn & van Schalkwyk, 2022). Speaking about the role women play in agriculture, Minister Thoko Didiza noted "As government we have developed and adopted the land allocation and beneficiary selection policy. In that policy as it will be explained we have set a target for 50 per cent" (South African Government, 2021). Minister Didiza also indicated that government has started a 'Women in Agro-processing and agribusiness program' to expand women's knowledge and entry into the business sector. This is also done to ensure support mechanisms for women in the agricultural sector is available (South African Government, 2021).

Smallholder farmers play a key role in rural communities. They generate income and produce food for household consumption (Van Averbeke & Khosa, 2007). Smallholder farmers are expected to produce more with constrained resources, because they lack access to quality inputs (Masiya & Mazenda, 2022). Some of the challenges include lack of access to finance, lack of access to knowledge and training, drought and

scarcity of water resources, overstretched and under-resourced extension staff, and climate variability and change (Food and Agriculture Organization [FAO], 2020).

Government has committed to supporting the smallholder farming sector through interventions that include land reform and access to water, amongst others (Carelsen et al., 2021). In supporting smallholder farmers, government has directed its focus in capacity building of the farmers through adequate extension and advisory services and increasing irrigated agriculture and cultivating of unproductive land in rural areas (DAFF, 2011). The Statistics South Africa (Stats SA) General Household Survey (GHS) indicates that small-scale farmers received agricultural development support from the government, private sector, CBOs and NGOs (Stats SA, 2016). Despite the support from different stakeholders, Rusenga (2022) argues that these farms remain unproductive.

Stats SA GHS (2020) shows that only 17,5% of South African households were involved in some sort of agricultural production activities, majority in Limpopo (37,5%), Eastern Cape (35,9%) and Mpumalanga (34,9%) respectively (*see Annexure B for contextual overview*). The survey also revealed that an overwhelming majority (79,7%) of South African households that were involved in agriculture were involved in an attempt to secure an additional source of food. Another 9,1% of households engaged in agriculture as subsistence activity producing the main source of food, while 4,7% used agriculture to produce additional income. Of the households that were engaged in agricultural production, 65,1% grew fruit and vegetables, 51,2% cultivated grains and 35,6% produced poultry, while livestock were produced by 29,2% of the country's households (Stats SA, 2020).

These examples demonstrate that although agrarian households are highlighted as important, and that there are plans and provisions in law and policy that are designed to support them, in reality the effects of these laws and policies are limited and uneven.

1.3 Structure of the report

The 2023 ARHE report is divided in five parts. The first part of the report introduces the research report and provides the reader with the context of this study. It touches on some of the fundamental research components such as the study problem, key research questions, study objectives etc. The second part of the report goes into detail about the methodology which this study adopted. The third part of the report gives an overview of the vast literature on the agrarian setting with a specific focus on case studies from the Global South. Part four of the report discusses the thematic analysis of the key informant interviews which

took place and part five of the report will discuss the results of the 2023 ARHE survey questionnaire. The final part of the report will speak on the recommendations of the study and give some concluding remarks.

2. METHODOLOGY

2.1 Introduction

This study followed a mixed-method research design strategy to comprehensively investigate the living and working conditions of agrarian rural households in 2023. It collected and analysed data using a combination of qualitative and quantitative methods. Qualitative methods included purposeful Key Informant Interviews (KII), as well as literature and document reviews. A distinct advantage of qualitative inquiries resides in probing analytical issues and contexts. This is particularly helpful in exploring the *how* and *why* questions. The quantitative element was a survey of agrarian rural households, with special emphasis on subsistence, smallholder farmers, farm workers, and farm dwellers. These approaches, and how they were combined to reach the study objectives are described below.

2.2 Literature and documentary reviews

A review of academic literature, case studies, policy documents, rules and regulations, media articles and other literature related to agrarian rural household economy was conducted. The literature review explored several key themes, including climate dynamics, gender and youth dynamics, experiences related to effects Covid-19 related lockdowns, and collective action, activism, and the policy environment. It reviewed case studies and drew on relevant examples from the Global South, focusing on how these themes impacted rural demographics and living standards, farmland ownership, access and use, the working and living conditions of farm workers and farm dwellers, and prevailing challenges with food access, food sovereignty, and food nutrition and security. The literature review connects the experiences of agrarian households in the Global South to the South African context, serving as a benchmark for comparing the study's findings. This comparison highlights both similarities and differences, contextualising the findings, and demonstrating how they align with, extend, or challenge existing knowledge.

2.3 Key Informant Interviews (KIIs)

2.3.1 Planned method

Participants targeted for KIIs included TA representatives, state actors, non-state actors in the agrarian sector (including farmer associations, trade unions and civil society organisations that operate in different value chains) and the private sector. Where necessary, a referral technique was used to invite/recruit the widest possible range of key informants, relying on TA and its partner organisations for referrals. The purpose of KIIs was to provide additional insights on dynamic relations within the agrarian rural households, complementing the review of literature and contextualising the survey results.

The themes explored in the KIIs included understanding and involvement in the agrarian economy, access to resources, food and nutrition security, the policy environment, social livelihood shocks (such as Covid-19 and related restrictions), climate dynamics and their impact on rural households. These themes are drawn from the ARHE 2023 objectives. They provide a comprehensive and nuanced understanding of various aspects of rural livelihoods, ensuring that the study addresses its goals effectively and offers actionable insights to improve the well-being and resilience of agrarian households.

2.3.2 Realised interviews

Table 2.1 below offers a glimpse into the KIIs conducted among the target groups from each province. Numerous obstacles restricted the KIIs. The team compensated by drawing on professional networks and contacts made in the field during the survey implementation. The KII process was conducted online using the Zoom² platform from November 31st to December 19th, 2023. This platform was selected for its effectiveness in facilitating accurate transcription of the interviews, and national accessibility.

Over 80 requests for interviews were made, and 47 interviews were confirmed, a reminder was sent out 24 hours before the interview, and only 24 key informants showed up and completed. Despite fewer than anticipated KIIs, the range and mix provided valuable qualitative insights.

Table 2.1: Key Informant Interviews (KIIs) conducted among the target groups from each province, 2023

Province	TA- affiliate	State Actor	Non-State actor	Total
Eastern Cape	BRC & SCLC	Department of Rural Development and Agrarian Reform	Isithembiso Multipurpose	4
Free State	None	None	None	0
Gauteng	None	Gauteng Department of Agriculture & Rural Development (2)	None	2
KwaZulu-Natal	AFRA & FSG	None	SEFA (Siyaphambili Emajuba Farm Dwellers Association), Rural Network, Lima Rural development foundation; KwaZulu Natal Agricultural Union & KZN Small Holder Farmer	7
Limpopo	Nkunzi	AgriSETA	None	2
Mpumalanga	None	Department of Agriculture, Land Reform and Rural development	None	1
Northern Cape	Indingo & SPP	None	None	2

² Zoom: An online communications tool which allows people to meet virtually.

North West	None	None	None	0
Western Cape	WFP & TCOE	Western Cape Department of Agriculture (4)	None	6
Total	9	9	6	24

Source: Own calculation using KII planning schedule

2.3.3 How was the data analysed?

The study used thematic analysis, a commonly used method for analysing qualitative data in academic research across various disciplines. It involves identifying common and recurring codes, patterns, themes, and categories in the data, which can then be used to develop insights and draw conclusions about a research area (Braun & Clarke, 2006; Byrne, 2022). Like any qualitative data analysis approach, thematic analysis is particularly valuable when exploring complex and nuanced phenomena that cannot necessarily be quantified (Braun & Clarke, 2006; Byrne, 2022). This is precisely why it was the most suitable method for this study, which delved into the intricate effects of economic disparities on disadvantaged agrarian rural households over the past ten years and factored in the Covid-19 pandemic’s impact and associated restrictions. Braun & Clarke (2006) and Byrne (2022) emphasise thematic data analysis’s iterative and adaptable nature, allowing one to move back and forth as guided by emerging information. The study arranged the vast amount of data from the twenty-four interviews using thematic analysis into distinct categories, which conveniently helped make sense of the data without compromising its quality. The tool/software used to analyse the qualitative data was Atlas Ti.

2.3.4 Making sense on the differences of the planned and realised data

Achieving the targeted number of KIIs faced several challenges. Firstly, the absence of TA affiliates in all provinces, like the North West province, for example, made it difficult to reach out to those people. This in turn made it hard to access databases and referrals as well. Secondly, there was reluctance from some stakeholders to participate. The team revealed that during interviews, some mentioned that they only showed up because their bosses told them to do so. Thirdly, the scheduled time of the KII occurred simultaneously with a busy time towards the end of the year. This meant that people were unavailable or had prior commitments, resulting in instances of non-attendance. Finally, South Africa's ongoing issue with load shedding disrupted the online data collection processes. This resulted in unreliable internet connections, forcing some participants to reschedule, and causing others to drop out altogether.

2.4 Survey of smallholder and farm worker households

Before embarking on the design of the 2023 Survey, the team undertook a critical overview of the 2011/2012 survey questionnaires. This is detailed below, before the planned and realised implementation details of the survey and its analysis are presented.

2.4.1 Critical overview of 2011/12 survey questionnaires

2.4.1.1 Strengths

The Support Centre for Land Change (SCLC) and Farmers Support Group (FSG) questionnaires, used by some TA affiliates in the 2011/2012 report, have been provided as a baseline for this study. This section thus evaluates the strengths and limitations of these surveys to ensure their suitability and effectiveness for the current research. Both SCLC and FSG surveys began by evaluating the food security status of households and their methods of accessing food. This assessment is crucial for determining whether agrarian households are food secure. The survey examined the use of credit for purchasing food, a significant factor in the agrarian economy with implications for food accessibility. Furthermore, the survey thoroughly investigated land accessibility, availability, and ownership. These variables are crucial for inclusion in the current survey due to their significant impact on the sustainability of agrarian rural household economic activities.

The surveys specifically targeted individuals practicing farming activities in a) communal farmland, b) those without homes but stay on farms (farm dwellers) on commercial farms, c) beneficiaries of land reform programs (both redistribution and restitution), d) residents of commonage areas, e) informal settlements/towns, and f) public or private church land.

Similarly, the current ARHE survey focuses on respondents meeting comparable criteria. The questionnaire uses distinct and consistent coding, facilitating the identification of incorrect variables. To ensure clarity and comprehension, the survey questions are framed in simple, straightforward language.

2.4.1.2 Limitations

Neither the FSG nor the SCLC survey includes information on the impact of climate related shocks on production or the harmful effects of Covid-19 and related restrictions. There are no mechanisms in place to revisit the same households in the ARHE survey, limiting longitudinal analysis. Both surveys lack data on farm workers or farm dwellers, which is a significant gap in understanding the full scope of the agrarian rural economy. Moreover, proper classification of households is an issue in both instruments, making it impossible to compare households between 2010/11 and 2023 due to inconsistent classification methods.

The surveys do not examine the food expenditures of agrarian households, which affects the ability to compare income and expenditure comprehensively. The production section of the surveys covers types of livestock and crops produced and sold, seed preservation, and access to farming inputs. However, it required respondents to recall their production activities from 2009, which may compromise data quality due to the difficulty of accurate recall. Additionally, comparing production data is challenging because the 2023 survey focused on the past 12 months, while the 2010/11 surveys looked at the past two years (2009).

Inadequate skipping patterns³ pose farming-related questions to individuals without access to land, disrupt the logical flow of the questionnaire. This oversight has significant implications for data quality and post-survey analysis based on respondents' answers. The presence of poor skipping patterns in the 2010/11 surveys could result in incomplete or inconsistent responses, potentially skewing the results and undermining the overall accuracy of the survey findings.

2.4.2 Planned method

Similar to KIIs, the 2011 study was used as a base for the buildup of the 2023 ARHE survey. HSRC worked closely with a reference group formed within TA structures to develop the survey instruments, identify geographical clusters and core sites for field research. These were built on the nine districts identified in 2011 and added another five districts, one each in the five provinces (Northwest, Gauteng, Mpumalanga, Northern Cape and Free State) that were excluded in the 2011 survey. Although the 2010/2011 survey was used as the base, a new survey was developed incorporating the core questions, and accommodating the new areas that were added to the study. Additionally, to tackle the gender disparities in the acquisition of land, it included gender-specific questions in the survey instrument on a household and individual level.

The study aimed to gather data from 100 respondents in each of the 12 study districts (Amajuba, Amathole, Bojanala, Cape Winelands, Enhlanzeni, Fezile Dabi, Namakwa, Overberg, Sarah Baartman, Sedibeng, Uthukela, Vhembe) in all provinces, thus targeting 1 200 respondents in total (as summarised in Table 2.2). However, following standard survey sampling practices, a slightly higher number of households and smallholder farmers was sampled, with 115 respondents per site as the aim, totaling 1,380 respondents across all provinces. All in all, the study aimed to sample based on land, range of communal peri-urban/urban and farm dwellers and workers on commercial farms. Following the TA call for proposals,

³ Skipping patterns: the development of a questionnaire follows a specific logic which means that questions are asked in a purposively and structured manner. However, we find that there are some questions that are not necessarily relevant to some respondents. If the question is not relevant/does not apply to the respondent, it gets skipped.

sampling followed a stratified purposive strategy⁴ rather than a random probability sample method. Through its localised advocacy and agrarian activism, TA representatives were envisioned to be a key resource to identify survey respondents. Agrarian households who have received assistance from TA affiliates were anticipated as a key category to be surveyed.

It was anticipated that supplementary databases would be obtained from other state and non-state provincial stakeholders, and that there may be problems interviewing farm dwellers on the farms where they reside. Our anticipated approach was to appeal to established farmer associations to help negotiate entry with district departments of agriculture and labour. Using agrarian rural households as the primary focus for data collection was chosen in order to gain more insightful information about the impact of policies on these units. It was also anticipated that the survey would help determine the current situation on the important variables, and open a space or platform for discussion about appropriate interventions. The research sites were chosen at a district level and were stratified according to the town/village. The HSRC worked with TA to identify these sites. It was felt that this would be beneficial in allowing for the comparison of the sites that were previously studied. However, this comparison was limited to available sites.

The analysis integrated the qualitative and quantitative data gathered to discuss the latest trends and relationships in agrarian rural households. Stata was used as the statistical software to conduct quantitative analysis.

2.4.3 Realised sample

The survey instrument utilised in this study was informed by a comprehensive review of existing questionnaires from TA, primarily drawing from data collected in 2010/11 survey instruments. However, it should be noted that the 2010/11 questionnaires presented certain complexities that rendered their direct adoption impractical for the purposes of this study. Using the 2010/2011 survey instruments as a base and taking into account the specific requirements of the TA objectives, a new survey was designed. In addition to revamping the survey, the HSRC transitioned from the traditional 'pen and paper' method of survey questionnaire completion to a digital approach using electronic devices and a data capture platform called RedCap. While initially challenging, this shift ultimately proved to be a more efficient method for data collection.

⁴ In the stratified purposive strategy, participants are selected based on predetermined criteria, meaning that in this study, the TA will choose participants from specified areas.

Experienced fieldworkers, in collaboration with the HSRC team and TA recruited fieldworkers, conducted data collection across the country. Fieldworker recruitment requirements included being proficient in the most prevalent local language in each district in order to translate the Survey and capture accurate responses in English. To prepare for the collection of survey data, a lively and intensive week of fieldworker training was held in the Cape Town office of the HSRC from the 9th to the 13th of October 2023. Prior to this, a comprehensive two-day virtual fieldwork induction was held on the 5th and 6th October 2023. These preparatory sessions aimed to equip enumerators with the right technical skills and psychosocial capabilities, ensuring they were well-prepared to engage in primary data collection. Moreover, these initiatives provided fieldworkers with a deeper comprehension of the study, setting a strong foundation for their subsequent intensive training.

Data collection started on the 23rd of October and ended on the 30th of November 2023, with districts divided into two phases for efficiency. Phase one, which covered Amathole, Cape Winelands, Bojanala, Enhlanzeni, Amajuba, Uthukela, Namakwa, and Fezile Dabi, ran from October 23rd to November 10th. Phase two included Sarah Baartman, Overberg, Sedibeng, Vhembe, Amajuba, Uthukela, Namakwa, and Fezile was completed from the 13th to the 30th of November 2023. The fieldworkers went above and beyond, completing 12 weeks' worth of work in just 8-10 weeks, encountering minimal challenges along the way. And as such, in most areas, the sample survey size exceeded the target (except for Gauteng).

The entry protocol for fieldwork involved meeting key stakeholders, such as TA affiliate offices and local agricultural offices, to gain information and access. Visits to police stations also helped in ensuring safety and making communities more willing to participate. Enumerators or TA affiliates facilitated easy participant access, recruitment, and data gathering when the relationship between them and the community was good. As such, this facilitation helped to reach the targeted sample size.

This study used both stratified purposive sampling, as well as the snowball sampling approaches due to challenges in obtaining databases from TA affiliates and key stakeholders. Despite some challenges, overall, the sample seems to be broadly representative of all the categories on a national level. Table 2.2 below presents a detailed breakdown of the districts according to the terms of reference for the respondents' sample size. It includes the number of targeted respondents as well as the realised sample size before data cleaning. The HSRC collaborated with TA to identify the geographical clusters and core sites for the research field. The table shows that most districts achieved their targeted sample sizes, except for the Sedibeng district, which fell short by 15 observations. Overall, the realised sample size (1,405) exceeded

the targeted sample size (1,380) by 25 observations. The districts of Overberg (129) and Amathole (126) had the largest sample sizes.

Table 2.2: Districts breakdown of targeted and realised respondent sample sizes before data cleaning, 2023

District	TOR Respondents Sample	Number of targeted respondents	Realised sample size pre-cleaning
Amathole	100	115	126
Sarah Baartman	100	115	120
Fezile Dabi	100	115	116
Sedibeng	100	115	100
Amajuba	100	115	112
uThukela	100	115	116
Vhembe	100	115	116
Enhlanzeni	100	115	119
Bojanala	100	115	114
Namakwa	100	115	118
Cape Winelands	100	115	119
Overberg	100	115	129
Total	1 200	1 380	1 405

Source: Own calculations

Building on the information from Table 2.2, Table 2.3 below shows the realised sample sizes by targeted district and respective local municipality after data cleaning (see explanation further below). Following data cleaning, the total sample size decreased by 6%, from 1,380 to 1,297. While the sample sizes for some districts decreased, others remained unchanged, indicating that some fieldworkers collected high-quality data. Notably, Amajuba (67) and Sedibeng (56) had the lowest sample sizes, each decreasing by more than 30%.

Table 2.3: Realised sample by targeted district and respective local municipality post data cleaning, 2023

District and Local Municipality	Realised sample size post – cleaning
Amathole (Eastern Cape)	126
<i>Amahlathi</i>	
Sarah Baartman (Eastern Cape)	120
<i>Graaff Reinet</i>	
<i>Willowmore</i>	
Fezile Dabi (Free State)	110
<i>Maokeng</i>	
<i>Steynsrus</i>	
<i>Viljoenskroon</i>	
Sedibeng (Gauteng)	56
<i>Emfuleni</i>	
<i>Midvaal</i>	
Amajuba (KwaZulu-Natal)	67
<i>Dannhauser</i>	
<i>Utretch</i>	
Uthukela (KwaZulu-Natal)	116
<i>Ukhahlamba</i>	

Vhembe (Limpopo)		
<i>Makhado</i>	<i>113</i>	113
Ehlanzeni (Mpumalanga)		
<i>Bushbuckridge</i>	<i>117</i>	117
Bojanala (North West)		
<i>Moses Kotane</i>	<i>112</i>	112
Namakwa (Northern Cape)		
<i>Hantam</i>	<i>118</i>	118
Cape Winelands (Western Cape)		
<i>Breede Valley</i>	<i>67</i>	
<i>Witzenberg</i>	<i>47</i>	114
Overberg (Western Cape)		
<i>Swellendam</i>	<i>128</i>	128
Total		1297

Source: Own calculations

2.4.4 Making sense on the differences of the planned and realised data

With regard to the development of the Survey instrument, we faced some challenges in adapting the 2010/2011 instrument. The structure of the surveys was notably complex and lengthy, and lacking in crucial questions about the impact of climate catastrophes and the novel Covid-19 pandemic with its related restrictions on agrarian households. Additionally, neither survey included data on farm workers or farm dwellers. Recognising these gaps and insights from the 2010/11 surveys, we used them as valuable lessons in formulating a comprehensive questionnaire for the 2023 survey. Consequently, while the earlier questionnaires provided foundational insights, the 2023 survey instrument was accurately designed to address these limitations and align closely with the objectives of the study.

With regard to recruiting and training fieldworkers, initially it was planned that TA affiliates would assist with identifying and nominating fieldworkers. Due to time constraints, and lack of available and qualified affiliates, HSRC recruited additional experienced fieldworkers to ensure that the data could be gathered as accurately and timeously as possible. This required some adjustments to the training programme to accommodate the additions. This led to some fieldworkers receiving the same content over a shorter period of time, which they reflected later meant that they spent more time in the field acclimatising to the survey and the RedCap platform. We do not believe this impacted the overall quality of the data, and the fieldworkers did remarkable work to fulfill their sampling and data collection mandates.

With regard to the sampling and recruitment of survey participants, initially the plan was to use TA databases and track previous respondents to enable a more thorough comparison. Although TA assisted in getting databases, they were inconsistent, and sometimes incomplete. In other cases, databases were not supplied by local affiliates as they did not take note of the TA request or information provided both through

TA and the HSRC research team. In some cases, TA affiliates would not pitch up for scheduled interviews. Furthermore, additional resources identified during the planning stage, e.g. government departments were sometimes unresponsive and uncooperative often citing the Protection of Personal Information Act (POPIA) as their main reason behind their reluctance to provide information, despite the legal requirement of ethical clearance documents being met. The team compensated by relying on willing TA affiliates, referrals and sometimes even personal or professional contacts that fieldworkers and research team had in the various districts.

Despite the success in finding participants, and meeting sampling criteria overall, challenges emerged, particularly within Gauteng Province. The lack of a local Department of Agriculture meant over-reliance on the database from a TA affiliate which ultimately proved insufficient. Additionally, it appeared that the TA affiliate faced challenges with community engagement, as their organised meetings often saw low attendance, indicating a strained relationship with the local community. In other areas, notably the Western Cape, farm workers were hesitant to be seen to be participating in the survey out of fear of reprisals from their employers. Other challenges fieldworkers faced in recruiting participants included the time of year, as many were busy with labour intensive processes, and the suspicion that the project was a form of electioneering. Despite these challenges, the overall sampling criteria have been met, largely through the creative problem-solving skills and relationship building that the fieldworkers managed.

As previously mentioned, the data collection was conducted using the RedCap software. A crucial step in the data analysis process is data cleaning, aimed at ensuring the accuracy and consistency of the data for use in the final report. Data cleaning includes various tasks, like identifying and rectifying missing information, outliers, misclassifications, and misspecifications. Additionally, it involves the identification and examination of core variables and the investigation of inconsistencies through cross-tabulations.

After a thorough data cleaning process, the team identified several observations with significant missing information and inconsistent question responses. It appeared that a significant portion of participants, especially those from Amajuba, Sedibeng, Fezile Dabi, and Cape Winelands, were not affiliated with agrarian households. This was deduced by examining whether participants identified themselves as farmers, farm workers, or farm dwellers. In cases where this information was unavailable, the team would cross-reference the participants' place of residence. If the individual did not reside on a farm or within a traditional area, it was inferred that they were not part of the survey.

As a result, these observations had to be excluded. More to that, some records showed that some participants had withdrawn from the survey, these were identified by the presence of empty cells with no information throughout the survey questions. The degree of missing information was significant, and these were deleted from the dataset. The districts these errors were in were Bojanala and Vhembe requiring their elimination as invalid data points. It resulted in reducing the surveyed sample of 1,405 (as reported in table 2.2.) to 1,279 as the total number of valid observations (in table 2.3) used for the estimates reported and explained in chapter 5.

Notably, the reduction in valid observations will impact the data analysis, particularly in the Sedibeng and Amajuba districts, where the remaining sample sizes are below (67 and 56, respectively) the required sample size which is 100 per district. The cleaned dataset was then exported to Stata for analysis. This study used descriptive analysis to provide an overview of agrarian rural household economy.

During the analysis stage, several challenges surfaced, including misclassification and missing information. Within the administrative section of the dataset, notable issues comprised the absence of signatures of consent, missing details regarding the closest town to the respondent, and lacking Global Positioning System (GPS) coordinates of interview locations. To address the absence of information about the closest town, researchers leveraged Google, utilising district and local municipality data. In instances where signatures of consent were missing, implicit consent was assumed based on participants' completion of the survey, or in some cases, fieldworkers reported technical difficulties preventing them from uploading pictures to RedCap. These discrepancies were identified in a small number of observations across all 12 districts surveyed.

The issue of missing information in questions concerning household income, expenditures, and the quantity of outputs produced or consumed posed a significant challenge for this study. To mitigate this, a solution was devised wherein the minimum amount spent for these items, as determined by the respective districts, was utilised. This approach ensured that the allocated values did not exceed the household income, thus avoiding the need to discard any observations due to this error. Additionally, discrepancies were identified in the method used to specify amounts, with some records incorrectly using commas instead of full stops to denote decimals. To address this, affected records were manually adjusted to replace commas with full stops.

Another fieldworker error involved misplacing responses in the "other (specify)" variable, despite appropriate options being available. Some fieldworkers seemed unaware of how to link given answers to

the required inputs in RedCap. Where possible, these records were manually corrected. For instance, entries like "DSTV" were moved from "other (specify)" to the relevant category, like "entertainment." If specific options were absent and accounted for more than 5% of the sample, a new variable was created. This mainly applied to policy-related matters. Post-fieldworker coding was employed to reclassify information. Misallocations were also found in "other (specify)," particularly for transportation and medical issues, but these made up less than 5% (1.6%) of the total sample, and less than 1% of the overall data. These errors were more common in the Amathole, Sarah Baartman, Cape Winelands, Overberg, Amajuba, and Ehlanzeni districts.

2.5 Conclusion

The methodology used in this study aimed to compare the status of ARHE between 2011/2012 and 2023. However, this comparison was not entirely feasible due to differences in the survey instruments and sampling strategies employed in each period.

3. AGRARIAN HOUSEHOLD DYNAMICS IN PERSPECTIVE: SELECTIVE REVIEW OF GLOBAL SOUTH EXPERIENCES

3.1 Introduction

As described in the methodology chapter, the 2023 agrarian household status report predominantly rests on findings from a purposive survey of households who make a living through agrarian activities often alongside a range of non-farm livelihood strategies. The purposeful methodology used in this study restricts the analysis and insights in terms of timeframe and locality. Acknowledging these limitations upfront invites a cautionary reading of reported findings but does not reduce to a call for a decontextualised reading of the insights. On the contrary, it is useful to situate the 2023 findings against the backdrop of experiences from countries and regions with agrarian structures and policies that are comparable to South African agrarian realities. It is also useful to reflect on what the 2023 study found against the backdrop representative data synthesised in Annexure B.

Who agrarian households are, how they work and live, how they engage with evolving agrarian policies and cope with climatic and structural socioeconomic dynamics feature prominently in the objectives of the 2023 study. Each objective, in turn, concentrates on a theme or construct which is made up of multiple facets. Furthermore, these composite constructs intersect in intricate ways that confront a study of this nature with conceptual and methodological complexities. Even so, these themes are useful to frame and think through what the new findings mean relative to agrarian livelihoods in other parts of the Global South. In effect, the themes offer a template to organise, synthesise and compare real-life examples that resonate with the priorities in agrarian political economy.

This section foregrounds and places in perspective the rest of the 2023 ARHE report. Compressing the burgeoning global literature on agrarian livelihoods into an appropriate backdrop against which to read this study is a monumental task in itself. In this case, a schematic approach is unavoidable yet a sensible way to assemble and analyse accessible resources. One option is to distil the broad sweep of experiences of agrarian populations into domains or layers of information through the lens of crosscutting themes.

Each layer defines a key aspect of agrarian development, and include demographic composition, farmland control, farm workers and food questions. The demographic layer brings together what is known about the absolute and relative size of people in the agrarian sector. Farmland control has to do with a foundational agrarian livelihood resource and who controls the land. The farm worker layer is about the conditions under which wageworkers are hired for on-farm employment. Food questions focus on what, how much and for

whom people engaged in agrarian activities produce crops and rear livestock. Thematic lenses that cut across every agrarian development layer are climate dynamics, Covid-19 experiences, gender and youth issues, and agrarian policies and activism. Even though this is neither a systematic nor exhaustive comparison, the selection and synthesis prioritise countries in the Global South because the agrarian realities in these cases are more helpful in making sense of changes in agrarian livelihoods in South Africa.

3.2 Rural demography living standards

The following section provides a review of literature pertaining to rural demography and living standards. This section sets out to understand the rural demography and living standards in relation to gender and youth dynamics, climate dynamics and collective action, activism and policy in the rural space. The focus of the literature reviewed in this section is that of studies located in African countries (excluding the research site, South Africa), Asia and Latin American countries.

3.2.1 Agrarian population snapshot

In this section, information pertaining to the scope and scale of agrarian populations is presented. It draws from studies that focus on the scale of rural livelihoods and populations, noting that comparative literature for the Global South on this subject is relatively limited.

As indicated in the International Fund for Agricultural Development ([IFAD], 2015), 75% of West and Central Africa's poor population of 90 million people reside in rural areas. In addition, their livelihoods significantly depend on agriculture, with more than 60% of the active population involved in agricultural activities. These proportions are close to those of India where about 70% of the people residing in rural areas depend on agriculture as a way of living (Sati, 2023). Bihar is the third most populous state in India and has more than 90% of its population living in rural areas, with 81% of them depending on agriculture (Lopez-Ridaura et al., 2018).

On-farm activities remain the choice of livelihood strategies in rural areas of Africa, where 52% of households fall into this category compared to just over 21% in non-African countries (Davis et al., 2017). The proportion of these households that engage in on-farm activities for own consumption is 92% in Africa and 85% in non-African regions. This is similar to Lowder et al., (2016) who found that 75% and 12% of land globally are family farms and smallholder farms, respectively.

3.2.2. Gender dynamics

The gendered dimensions of rural agrarian households are a cross-cutting feature in research, and though this section highlights some of the key information from the literature, further sections include a gendered lens.

While gender inequality exists in the agricultural sector, it is not easy to quantify (International Labour Organisation [ILO], 2018). Globally, women are 43% of the agricultural labour force (Food and Agriculture Organization [FAO], 2024); the proportion increases to 49% for low-income countries (ILO, 2018), and ranges from 20% in Latin America to above 50% in some African and Asian countries. However, women often have neither access to nor control over essential farming resources and continue to be underrepresented in decision-making and leadership (Farm Radio International, 2021). The contribution of women to the rural economy is extensively underestimated as they are concentrated in household work and unpaid care, with their contribution in subsistence farming seldom compensated (ILO, 2018). However, Onyalo (2019) suggests that women's agricultural production should be understood based on their contribution to food security in their households and communities rather than through their contribution to commercialised agriculture.

Onyalo (2019) goes on to state that 42% - 65% of the Kenyan agricultural labour force consists of women. However, women face an array of difficulties such as minimal opportunities to productive land, and limited availability of extension services and credit facilities. Females in agriculture often face exclusion from contemporary contract-farming setups due to lack of secure land tenure. This hampers their agricultural output despite there being strong evidence indicating that women typically achieve higher land productivity compared to men. Similar findings were seen in a case study conducted in Depalpur, Pakistan, where women were found to participate in all stages of crop cultivation such as planting, transplanting, weeding and harvesting, together with post-harvest duties such as threshing, drying and storage, along with their domestic chores yet still have unequal access to important resources compared to men (Butt et al., 2010).

In the Philippines, Angeles and Hill (2009) explored the ways in which rural economies require livelihood diversification, since agrarian activities do not support households. Female participants in their study supplemented agrarian household income through starting up small businesses and working as casual labourers on other farms. Despite their significance in empowering rural women, Angeles and Hill (2009) write that the two activities are often excluded from local government policies and programmes. Instead, local government programmes include training women in petty production of commodities, like making candles, soap or jam without business or marketing training to make these programmes viable.

In order to improve women's participation in agriculture, it is imperative that women be more involved in the decision-making processes in agriculture, women's organisations should be supported more and more financial assistance must be afforded to female farmers (Onyalo, 2019; Butt et al., 2010).

3.2.3 Living standards

According to a 2023 study conducted by FAO, IFAD, UNICEF, WFP and WHO (2023), not only is agriculture often the source of livelihood for rural populations but, the poorest people across and within countries normally live in agricultural areas. As a result, people living in the rural spaces commonly migrate from poorly remunerated agricultural work when there are job opportunities in other sectors. However, FAO, IFAD, UNICEF, WFP and WHO (2023) pointed out that some that some urban households in Africa, also do farming at a medium-scale and have substantial agricultural land size.

Livelihood options are often limited in rural areas, with women being more affected than men. Research conducted by the United Nations Environmental Programme (UNEP) (n.d.), shows that in Kenya, many people who reside in rural areas often have inadequate access to basic sanitation services and safe water. Women were often more adversely affected than men due to gendered division of labour which placed the responsibility for water collection and domestic work with women. In light of the frequently occurring droughts, women and young girls have been forced to travel long distances in order to acquire water which forces them to reduce or give up their economic activities and/or their education.

3.2.4 Climate dynamics

Farm Radio International (2021) conducted interviews with close to 12 000 rural people involved in food systems to understand how food systems could be transformed to address their needs and that of their communities in response to climate change. Participants who responded that their only way of coping with climate change would be to relocate to an alternative place were below 9%. More than 90% of them were positive that they could carry out coping strategies to deal with climate change in their current communities. In addition, the study found that women are the ones who had a higher likelihood of migrating while for men the best strategy would be to protect the natural environment. Age was also a factor as participants older than 30 years, irrespective of gender, more unlikely to opt for migrating because they believed that the best way to deal with the problem of a changing climate is to use improved inputs.

Varying climate change has also been found to have negative effects on both the livelihood and production prospects of individuals residing in rural areas. In a study conducted in Nigeria, Van der Merwe et al. (2022) explored the adverse effects of extreme changes in climatic conditions on the health outcomes of children. This study utilised data from the three waves of the Nigerian Living Standards Measurement Study-Integrated Surveys on Agriculture (LSMS-ISA). The findings from this study suggest climate change substantially affects the overall health outcomes of children, with these being more severe in rural areas as compared to urban areas. Further, it emphasises that heat stress, lower air and water quality, decreased agricultural productivity and more frequent extreme weather occurrences are all direct effects of temperature increases on child malnutrition. The study proposes a need for policy interventions that assist in addressing the effects of adverse climate change to prevent malnutrition especially amongst children, advancements in public infrastructure such as access to electricity, more support in the agricultural sector and lastly, that the promotion of climate conscious agricultural practices may also be beneficial in reducing the incidences of child malnutrition for countries like Nigeria who largely depend on subsistence farming.

As mentioned above, adverse climate change conditions also have an impact on agricultural productivity in rural areas. Habib-ur-Rahman et al. (2022) studied how adverse climate change influences rice and wheat production in rural Pakistan. The authors utilise field data, historic and future climatic data, crop models, and a trade-off analysis model to analyse how changes in climate affect rice and wheat crop production. The authors find that South Asian countries are particularly at risk of adverse climate change due to larger population, geographical location and outdated technologies. They argue that creating adaptation and mitigation strategies have the potential to help develop sustainable agricultural productivity in respect of climate-smart and robust agriculture. Additionally, transdisciplinary research and early warning systems are essential in assisting to alleviate the destructive effects of climate change in Asia's most susceptible regions.

3.2.5 Collective action and policy activism

People who reside in rural areas often face a multitude of problems which include land ownership inequities, service delivery, economic development and public assistance. Considering these issues and the absence of consistent and tangible solutions, collective action and activism has been crucial instrument in addressing persistent issues. Activism includes community organisations and grassroot movements who all work together towards a shared common goal.

Andersson and Gabrielsson (2012) outline that collective action has positively impacted food security in rural Kenya and Uganda. The authors state that collective action, specifically those among women farmers

is a potential pathway towards improving livelihood and building resilience with regards to challenges like the decline in soil quality, unavailability of land, unification of differing markets, frequency of diseases and the negative impact of climate change. In addition, the authors also find that collective action among farmers at large also contributes towards their ability to manage and adjust to change.

Being a member of social group particularly farmers associations appeared to contribute to reducing poverty among South West Nigerian farming communities, especially among male-headed households (Ogundipe, et al., 2019). This is due to the accessibility of appropriate information and availability of credit sources at low rates of interest that provide members with benefits that reduce risk and uncertainty in their farming activities.

3.3 Farmland ownership, access and use

This section reviews experiences from a purposeful sample of countries in the Global South to place the 2023 agrarian rural household survey in perspective. Instead of systematic and representative selection criteria for countries included to illustrate an aspect of farmland tenure, this review opted for on a discretionary and eclectic inclusion of cases. Priority is given to countries that have embarked on a prominent episode of farmland redistribution or reforms that have overhauled the size and ownership patterns of land.

Who controls a farm, or agricultural landholding is a pivotal and longstanding question in countries where deep-seated land inequalities and land conflicts exist, particularly in the Global South. A wide spectrum of meanings of farmland control exists and these varied meanings find expression in land policies. On the one hand, control over farmland refers to the legal ownership of land through documented and verifiable titles. Land titling thus certifies and protects an entity as the *de jure* property owner. Control, on the other hand, can also mean access to an agricultural plot (use right) without any official title to the landholder or occupier. This is a wider range of land tenure arrangements, including instances where traditional customs of a community and cultural traditions prescribe land access and use conditions.

Since 2010, there has been a proliferation in data sources on landholding size, the distribution of land ownership and monitoring transactions in trading farmland. Alongside the decadal tracking of land data by the FAO (2024; see also Doss et al., 2020; Johnson et al., 2016; Lowder et al., 2021 for this land tracking data), customised global datasets such as Land Matrix (Ahmed, 2021; Bluwstein & Cavanagh, 2023; Lay et al., 2021) and the Property Rights Index [Prindex] (Feyertag et al., 2021) are some of the prominent landholding data platforms that have been constructed. While these data sources differ in terms of their

underlying methodologies, each one caters for nuanced investigations into the characteristics of farmland tenure and use.

Drawing on the latest round of the FAO's decadal land census, Lowder et al. (2021) summarised trends in farmland distribution for 180 reporting countries. It is arguably the most representative global farmland dataset based on one standardised survey methodology (FAO, 2024). The underlying typology classifies farmland distribution as a combination of the size of land used for primary crop and livestock farming operations tied to a lawfully recognised owner. Estimates in Lowder et al. (2021) shed light on the skewed distribution of the amount of agricultural land for small to large farmland-size categories. Large farm holdings control a bigger proportion (or share) of farmland which continues a trend of the 40 years before 2000. Globally, smaller landholdings (measuring ≤ 2 ha) make up more than 80% of all farms, but control roughly 10% of all farmland. By contrast, the top 1% of all farms (measuring ≥ 50 ha) control 'more than 70% of the world's farmland' (Lowder et al., 2021).

A central question therefore is how farmland access and ownership determine the social relations among people who work and live in the agrarian sector. In this instance, ownership, access and use refer to the social relations that take shape and exist around landed property. Treated as property, farmland is an object of ownership, control and access relationships. Ownership is exclusionary and involves binary elements (owners versus propertyless) and distributional inequalities. Farmland may be registered in the name of a titleholder who neither uses nor resides on the property, such as in absentee-landlord arrangements. In agrarian settings, non-owners of farmland often have use rights over a plot, but these are always subject to conditions. But farmland is also a productive means for growing crops as well as livestock grazing and herding, an aspect which is inseparable from property.

3.3.1 Climate dynamics

As a natural resource, land is an intrinsic element of the earth's terrestrial environment (Jacobs, 2019; Thornton et al., 2009). Using this terrestrial resource without care can harm the environment but also unleash climatic damage that can force livelihood vulnerabilities to acute tipping points. The amount of land is therefore as important as 'nature's wealth' stored in it, which means that land quality (based on soil fertility metrics) is decisive in mapping productive capacities and possibilities of land in different agroecological zones (Thornton et al., 2009). Entities that control and use farmlands want to extract benefits from all the natural qualities that are inseparable from a piece of land. However, landholders need to use and manage the land with the aim of preserving rather than exhausting its finite quality or natural fertility

benefits. Tapping the natural wealth stored in land for exclusionary economic gains must be balanced against the optimal protection of the environment, which includes land, in other words the livelihoods objectives that underpin the control and use of land should not induce climate damage (Thornton et al., 2009).

Thornton et al. (2009) further argue that it is urgent to recognise feedback loops between land use and worsening climate health (manifesting in larger, longer and more extreme weather events) from one agroecological setting to another. Alongside biodiversity losses that accompany protracted climatic stress, a growing range of species face extinction threats coupled with an acceleration in degraded lands as persistent weather stressors intensify land use to sustain yields. Furthermore, the interactions of the biological and chemical traits of land with the socioeconomic system and its matching institutional governance regime that define the rules of land tenure require an integrated approach to the farmland-climate nexus (Borras et al., 2020; Thornton et al., 2009). Jacobs and Msulwa (2019) emphasise that attempts to sustain the fertility of farmlands through higher dosages of chemical inputs tend to yield short-run benefits. In the long-term, however, artificial land productivity stimulants can render land in fragile zones unproductive for crop farming and amplify risks of irreversible ecological harm. The natural wealth in the land must therefore be tapped with caution.

Agricultural impact on climate change is not confined to what is done during the farming process, it is also about agricultural expansion damaging climatically important forests. One example includes the way in which large-scale crop production for exports is rapidly expanding into Ghana's fragile rain forests with environmental costs that have been underestimated (Adzigbli et al., 2024). Under the auspices of agrarian development policies and authorities in Ghana smallholders occupy larger tracts of ex-forest lands for the cultivation of oil palm and rubber. Over roughly three decades, Adzigbli et al. (2024) detail how this land use scheme has contributed to losing land covered with forests and holding waterbodies for the benefit of rubber cultivators and real estate builders. Digging up forests for the conversion of land for crop and livestock farmland invariably releases carbon dioxide from soil tillage which enlarges the greenhouse pollution footprint of primary agriculture (Alden Wily, 2021).

Lay et al. (2021) show that the 2000-2020 surge in 'land grabs' (or Large-Scale Land Acquisitions-LSLA) came at growing environmental damage and ecological costs that are yet to be accounted for in full. The farmland scramble in Ghana is concentrated in ecologically fragile hotspots, mainly arid lands with frequent droughts and erratic rains (Ahmed, 2021).

Another example of the intersection between climate and rural livelihoods is evident in the contestation over grazing land that has intensified among diverse landholding groups in Northern Kenya in the middle of prolonged drought and related climate crises (Wachira et al., 2021). Historically, pastoralists in these arid zones have relocated livestock grazing in response to droughts and inadequate rainfall. Shifting to alternative land however depends on the availability of land and tenurial rules that govern land access. Wachira et al. (2021) found that pastoralists must bridge more impediments when they migrate to better land as a climate crises adaptation strategy.

How well landholders cope with and respond to climate shocks depends on their livelihood resources, capacity and resilience. Countering increasingly formidable natural disasters rests on the means at the disposal of those affected by it. Therefore, landholders in fragile ecological zones cannot ignore climate dynamics. In a proposal for future research priorities, Thornton et al. (2009) consider the influence of population growth and cultural traditions on land use in the context of environmental crises in developing countries but exclude prominent socio-structural conditions from their futuristic synthesis and possibilities. More specifically, social inequalities that reflect in the unequal distribution of power and decision making that bear so heavily on the land control-climate crisis nexus merit attention and inclusion in analyses. Resource-poor smallholders confront higher barriers in their battles to adapt to and mitigate climate shocks in comparison with wealthier landowners. Furthermore, studies that incorporate gender and related inequities throw a better light on the facets of real-life inequalities that accentuate the burdens of climate dynamics on marginalised landholders and users.

3.3.2 Gender dynamics

Who owns the land is a social question that incorporates economic, customary rules, societal norms and identity. This means that farmland ownership is an economic category or an enabling source (productive input) of livelihood activities that overlaps with the sociocultural context. Controlling farmland as a woman, man or youth therefore adds identity markers and societal norms to farmland ownership. Landowner identity matters and bears imprints of the traditions, norms and perceptions that members of a society hold about who can or cannot own land (Alden Wily, 2018; Archambault & Zoomers, 2015; García-Morán & Yates, 2022; Johnson et al., 2016).

Female-male landholding inequalities represent a way to sum up the gendered distribution of land size, usually in favour of men. Less than 15% of global landholders are women, with the distribution ranging from 5% in North Africa and the Middle East to and 18% in the Caribbean and Latin America (FAO, 2018).

However, the amount of land women own also indicates whether women have nominal or real power to decide what happens to the land they own. This means the security of female landownership depends on the property rights regime that regulate how female landowners relate to other landholders and the landless in their community. Archambault and Zoomers (2015), among others, observed that women may be the majority of land users but may not have full and secure ownership of an agricultural holding.

Sometimes women own land as individuals, in partnership with a companion or husband or in a collective landholding arrangement (based on ethnic, tribal or religious affiliation) (Alden Wily, 2018; Hannay & Scalise, 2015; Vázquez-García, 2015). Johnson et al. (2016) summarised the gender dynamics of land ownership in a selection of countries in East Africa and South Asia. Comparing the status of women in rural households in Tanzania and Uganda is revealing. In both countries, three out of four rural women are married, with female self-reported headship higher in Uganda (~30%) than in Tanzania (~25%). The landholding status of women across the two countries show marginal differences with about a fifth of Tanzanian women being landholders compared to 16% in Uganda. However, participation in household decisions (including agrarian activities such as the sale of land titled in the husband's name) is substantially higher among rural women in Uganda (57% enjoy the power to decide) than in Tanzania (37%) (Johnson et al., 2016). A finding that Johnson et al. (2016) underscore is when women control assets (including farmland holdings and inputs), including cases in which they exercise joint asset control with their spouses, they have more weight in deciding their family's livelihood activities. Furthermore, women's decision-making power derives from asset ownership which is necessary yet far from sufficient in determining the outcomes of livelihood activities (Johnson et al., 2016). There is a need to dismantle the sociocultural stereotypes, beliefs and structures that militate against women's landholding rights, traditional norms that often exclude women's agency ('hidden disempowerment') in collectively overcoming the crises that afflict agrarian households.

According to Mueller et al. (2018), the roles and responsibilities of women in agriculture vary on the African continent. They are influenced by religion, ethnicity, and type of farming activity. For example, women are typically responsible for livestock rearing and handling the earnings received. In the south of the country, crops like false banana (enset) are regarded as 'women's crops' and women are primarily responsibility for them.

3.3.3 Land tenure policy

Land policies refer to state-backed rules that regulate the allocation of land parcels, who owns a piece of land and the conditions under which individuals, groups or communities hold and trade land. This is a distinctive feature of formal land tenure systems overseen by a recognised governance authority and forms the hallmark of well-developed property rights regimes. Even so, it remains but one land tenure category. In practice, however, different statutory land tenure systems came into being, ranging from exclusionary private to collective ownership models, and often operate side-by-side with landholdings outside any formalised system of allocating land (Alden Wily, 2018; Feyertag et al., 2021).

One purpose of land policy is to safeguard ownership structures and reinforce property relations. In other words, the absence of clear and enforceable land policies signals the absence of certainty and stability in a property regime. Land tenure policy can also be about restructuring landownership patterns. Policies can catalyse fast or slow shifts in land tenure structures, with impacts that may vary across localities due to imperatives unique to a spatial context.

In agrarian and land policy, who owns and controls key resources, particularly farmland, influences rights to access and use of such resources. Furthermore, this nexus of ownership-access-and-use of farmland is also crucial in determining living standards of people who depend on it for a livelihood. Land policy reforms can happen without substantial modifications to the constitution of a country, as the latter usually involves broad societal participation which is complex and time consuming (Alden Wily, 2018). Uganda, Mexico, Brazil and Philippines are examples of countries in which cycles of replacing the constitution paved the way for new land policies as well (Deere & Leon 2003; Hunt, 2004; Vázquez-García, 2015).

In a comparison of how land ownership regimes evolved, Alden Wily (2018) documents the intersections between sociopolitical conflicts, changes in land tenure policies and the intended or aspirational aims inscribed in the policy at the outset. Historically, land tenure laws have been rooted in, given effect to, and operated inside the boundaries of constitutional prescriptions on property ownership. In addition to defining the overarching objectives of transferring land from one owner to another, constitutions also prescribe the mechanisms of how land transfers must be implemented. What follows are a number of examples of the different land related examples across countries in the Global South.

Despite several waves of land redistribution programmes, landholding inequalities in Mexico, Philippines and Ghana have either persisted or accentuated due to a mix of sociocultural and structural forces (Ahmed, 2024; Bequet, 2024; Deere & Leon, 2003; Honig, 2022; Hunt, 2004; Morando, 2023). In Mexico, slightly

more than three quarters of all agrarian households are members of *edjidos* (a collective landholding entity). The country's recent agrarian census shows that more than 50% of landed property falls under some collective landholding control. Reforms introduced in the early 1990s paved the way towards *edjido* land access and use to fall under commercial or market-driven prescriptions (García-Morán & Yates, 2022; Vázquez-García, 2015).

In a different form of land ownership, Morando (2023) demonstrates the primary agrarian nature of Uganda, in which roughly two-thirds of people working on farmland holdings do so to produce food for household consumption. Furthermore, in this agrarian workforce more than 45% self-reported that they do not engage in additional livelihood activities other than operating farmlands for subsistence. While Uganda's average farm-size is relatively small (2 ha), the average commercial farm holding (2.2 ha) is about 50% larger than the average subsistence farm (1.48 ha). Uganda's subsistence farmers actively sell, buy and rent farmlands.

The Philippine government has a policy on redistributive land reform, yet inequalities in landholdings have worsened over the post-2002 decade (Bequet, 2024). Wealth and land inequalities inherited from the era when the country was under Spanish colonial rule persist. Indicators of farmland use and inequality over two decades since 1991 display the growing prevalence of smaller farmlands alongside a decline in the amount of agricultural land and wealthier individuals holding more land (Bequet, 2024). Technologies directed at higher crop yields, such as genetically modified maize crops, have increased the concentration of land in the top 10% of land holders.

Ahmed (2021) reports data from the International Land Coalition's Land Matrix database that recorded the sale of 83.2 million ha of farmland mainly in Africa and Latin America during the first decade of this century. In the next decade, the documented number of transactions and total amount of land sold was less than 40% of the pre-2010 period. The main buyers of these lands are rich individuals, corporations and governments in a diverse mix of high-and-middle income countries that include tax havens (Lay et al., 2021).

In summary, what stands out from this selective synthesis is that agrarian livelihood prosperity hinges on farmland tenure security, with the latter a major structural determinant of the former. Resource poor small farmers, women and landless workers make up the widening base of this farmland tenure pyramid that also displays narrowing concentrated ownerships at the apex. Land tenure inequalities and insecurities have aggravated the plight and vulnerabilities of marginalised agrarian social groups to climate catastrophes and

macroeconomic crises. Growing polarisation in farmland ownership call into question the design and implementation of agrarian policies that authorities in many countries advertise as pro-poor.

3.4 Farm workers and farm dwellers

The conditions of farm workers and farm dwellers play a crucial role not only in agricultural productivity but also in broader socio-economic and environmental dynamics. Exploring how farm workers and people living on farms work and live, including layers of climate, gender and youth dynamics, experiences associated with the Covid-19 pandemic as well as the collective action, activism and policy in the Global South gives insights into the multifaceted challenges faced by agricultural communities.

3.4.1 Climate dynamics

Climate dynamics can have significant impacts on farm worker's working and living conditions affecting factors like labour availability, health as well as livelihood sustainability. One prominent case study example is the tea industry in Kenya, where climate variability directly influences the working and living conditions of farm workers. Kenya's tea industry holds immense economic importance as it serves as a cornerstone for poverty alleviation, job generation, and the country's foreign exchange earnings. Additionally, it serves as a vital source of income for numerous rural areas (Chang & Bratloff, 2015). However, it faces considerable vulnerability to climate change.

Research conducted by FAO (2015), Kotikot et al. (2020) as well as Kariuki et al. (2022) revealed that Kenyan farmers are increasingly exposed to climate risks due to successive waves of drought and frost, erratic rainfall patterns, and rising maximum temperatures. These climatic shocks have led to lower agricultural production levels. Also, during periods of drought, tea bushes yield fewer leaves, resulting in decreased work opportunities for farm labourers and consequently impacting their income (Kariuki et al., 2022; Kotikot et al., 2020). On the other hand, a study conducted by the United Nations Development Program (UNDP) (2024) showed that prolonged droughts as a result of climate change have resulted in water scarcity in many parts of Kenya, making it difficult for farm workers to access water for irrigation and domestic use.

As far as the health risks and safety are concerned, high temperatures are said to increase the likelihood of heat stress and dehydration among workers, particularly during peak harvesting seasons. A study conducted in northern Ghana, where climate is projected to rise, revealed that farmers face significant heat stress, which poses health risks (Frimpong et al., 2016). Furthermore, prolonged exposure to high ambient

temperatures can adversely affect farmers' health and suppress productivity, with farmers engaged in labour-intensive farming practices being particularly vulnerable (Frimpong et al., 2016). In the same way, research conducted by Carleton (2017) suggests that temperature fluctuations in India could be linked to the suicides of approximately 60,000 farmers and farm workers in the past thirty years. The study revealed that the correlation between suicides and the agricultural growing season in India increased, coinciding with periods of heightened heat that also diminish crop yields.

Agrarian households are especially at risk from climate change because their livelihoods depend on weather-sensitive agricultural activities. It is therefore important to take steps to increase farmers' resilience to withstand the effects of climate change. Harvey et al. (2018) conducted a study on the impacts of climate change and the adaptation strategies adopted by smallholder farmers in Central America. The research found that almost all (95%) of the smallholder farmers surveyed observed climate change. Many are feeling the effects of higher temperatures, irregular rainfall, and extreme weather on their crops, leading to lower produces, heightened occurrences of pests and diseases, reduced income, and sometimes, food shortages (Harvey et al., 2018). For instance, 87% of maize growers and 66% of coffee farmers mentioned negative impacts on their crops due to climate change. Additionally, 32% of all smallholder farmers experienced food insecurity after extreme weather events. Nearly half (46%) of the farmers noticing climate changes have adjusted their farming practices accordingly, with the most common change being planting trees (Harvey et al., 2018).

Similarly, Shapiro-Garza et al. (2020) collaborated with smallholder coffee cooperatives in Guatemala and Peru to assess the practicality of different approaches in addressing climate change. These approaches included crop diversification, rainwater collection systems, pest surveillance and control, collective coffee seed banks and nurseries, and solar coffee drying facilities.

The research revealed that there are no 'cookie cutter' answers for dealing with climate change in farming. While certain strategies might seem more doable for small farmers, whether they work well depends on a number of different factors specific to each situation (Shapiro-Garza et al., 2020). Even in similar farming areas and nearby places, the difficulties posed by climate change as well as the resources farmers have to deal with them can differ a lot. To figure out if climate change resilience strategies will work, it's crucial to look at a number of things like the environment, culture, money, and politics in a comprehensive, hands-on way. This means getting everyone involved to really understand what's going on and what needs to be done (Shapiro-Garza et al., 2020).

3.4.2 Gender dynamics

Literature tends to present household tasks, like childcare, tending to the sick, collecting water and firewood, and cooking, as typically assigned to women. Cultural norms strongly influence this division of labour, often confining women to domestic roles while excluding men. For instance, research by Padmaja et al. (2019) discovered that in semi-arid regions of India, women dedicate more time to tasks such as gathering firewood, fetching water, cooking, and caring for the family, whereas men tend to focus on farming, non-farm work, livestock care, travelling and other activities.

In a similar vein, a study by Kinkingninhoun Medagbe et al. (2020) examined the involvement of women in rice farming across four countries (Burkina Faso, Côte d'Ivoire, Madagascar, Sierra Leone). The study looked at how labour time was distributed between men and women and how this affected their income. Additionally, the study examined what factors influenced the amount of work women contributed to rice farming in different environments. The findings showed that women do participate in farming activities, but the amount of time they dedicate to it differs based on factors like age, education, and social status. For instance, younger women, particularly those in their childbearing years (18–29), tend to spend more time on domestic tasks, family care, and personal activities, while women aged 40 and above allocate more of their time to economic activities, including both farming and non-farm work.

ILO (2016) revealed a clear gendered division of labour in tea plantations in Bangladesh. A large number of workers are women, primarily engaged in tea plucking. Additionally, female workers are entitled to maternity leave with their regular daily wages for their first two pregnancies. This indicates some progress in narrowing the gender gap among farm workers in Bangladesh, although the change is not substantial. Similarly, a case study in Ghana on women farming cocoa showed that although the majority of smallholders involved in cultivating these crops are men, there are noticeable indications of increasing female participation in cocoa farming. It has been observed that farms managed by women are equally productive as those managed by men (Raney et al., 2011).

Gender dynamics significantly influence the experiences and circumstances of farm workers in the Philippines. While men often engage in tasks like preparation of land, planting, and harvesting, females are typically involved in activities like weeding, planting, and post-harvest processing. Female farm workers often face unequal wages and working conditions compared to their male counterparts (FAO, 2011). For instance, research investigating the involvement of rural women in agriculture sector in India showed that the majority of female labourers in rural areas lack formal education, which influences their involvement in agricultural activities. The involvement of women in rural labour markets vary greatly across regions,

with a tendency to be disproportionately represented in unpaid, seasonal, and part-time positions. Furthermore, women often receive lower compensation than men for comparable work (Mondal, 2013).

Addressing gender disparities among farm workers involves ensuring that women have equal access to productive and natural resources, services, markets, infrastructure, decent employment, and new technologies. It also entails enhancing women's knowledge, skills, and leadership within rural institutions and organisations, and actively involving them in the creation of laws, policies, and programs (FAO, 2024).

3.4.3 Covid-19 experiences

The pandemic has made clear how heavily dependent the agricultural sector is on migrant labour. As a result of the Covid-19 epidemic, migrants became one of the most affected populations (FAO, 2022). The vulnerability of migrant agricultural workers to food insecurity was exacerbated by limited or non-existent access to social support (FAO, 2020). Many of them have irregular or informal work agreements, live in subpar housing and work environments, and lack access to social security, sanitation, or healthcare (FAO, 2020). They also encountered difficulties obtaining information on Covid-19 preventive measures as a result of inadequate information from employers, illiteracy, language hurdles, and/or restricted internet access (FAO, 2022).

Thailand's agricultural sector relies heavily on migrant workers. During the pandemic, workers went back to their home countries, which caused labour shortages and impacted food security by putting a burden on Thailand and the larger Southeast Asian supply network (Gilmour & Lin, 2021). The epidemic worsened the farm workers' pre-existing living and working circumstances. The pandemic regulations made the mistreatment and abuse of immigrant farm labourers even worse (Richardson & Pettigrew, 2022). Migrant workers in the agricultural industry were denied access to health, unemployment, and sick leave benefits (Richardson & Pettigrew, 2022) and were given limited benefits or protections (Gilmour & Lin, 2021). A study conducted by Kunpeuk et al. (2022) focusing on migrant farm workers revealed that a significant number of them lived in overcrowded conditions and lacked access to social or health services. The study further discovered that Covid-19 "disproportionately affected" migrant workers.

In addition, a significant number of migrant agricultural workers were exposed to unsafe conditions, which increased their vulnerability to Covid-19 infection (Marschke et al., 2021). The workers also experienced severe discrimination and locals blamed them for introducing the Covid-19 to the country (Marschke et al. 2021). The discrimination was institutionalised when the government and Thai employers resolved to put

migrant workers who were infected and those who were not infected in one housing unit, which caused Covid-19 epidemics among immigrant labourers across Thailand (Marschke et al., 2021). Thailand authorities were unable to introduce comprehensive legislation that guaranteed social security and health care coverage for workers (Richardson & Pettigrew, 2022). A study conducted by Afrin et al. (2022) in Bangladesh highlighting livelihood difficulties and coping mechanisms of farm workers during the Covid-19 outbreak showed that the majority of respondents reported that Covid-19 hurt their standard of living. The Covid-19 pandemic's consequences in Bangladesh were not only limited to health; they had a significant effect on social and economic facets (Bhuiyan et al., 2020).

The pandemic unveiled Costa Rica's heavy reliance on migrant labour in agriculture and brought to light the insecure conditions of farm workers in the industry (Voorend et al., 2023). The violations of health protocols and human rights on farms were thoroughly broadcast in early 2020 (Bosque, 2020). According to Voorend et al. (2023), Costa Rican employment in agriculture is often low-paying and unstable, with no formal work contracts and benefits (Voorend et al., 2023). Additionally, there is a low level of unionisation and dire working conditions. One of the main problems is that they are outsourced, which means that migrant workers don't receive social protection benefits and make less than the minimum wage (Voorend et al., 2019). The workers also have issues with social rights, regularisation, and discrimination (Voorend, 2019). Similar conditions are happening in Columbia, the ILO (2021) shows that the coffee supply chain's most vulnerable link appeared to be temporary employees, particularly coffee pickers, because of greater degrees of informality and inadequate access to health and social security benefits. The report further revealed that this was more prevalent in undocumented migrant workers who were not eligible for government-subsidised health care or any other form of social security. Additionally, it was noted that employees tended to conceal Covid-19 symptoms out of concern of losing their jobs.

The pandemic has brought to light and exacerbated the threats that African communities and agricultural workers were already experiencing (Centre for Social Excellence, n.d). During the pandemic in Zimbabwe, farm workers, who, like the poorest households, survive on meagre incomes well below the poverty line, were not included in the Department of Social Welfare's list of recipients of higher risk allowances which other essential workers were entitled to (Hivos, 2020).

Meludu et al. (2022) conducted a study in Nigeria examining the extent to which the pandemic has impacted migrant farm workers and the way it may have affected the security of food and nutrition. According to the study, food costs increased by 19% and 8% in Anambra State and 11% in Imo State, respectively, while monthly income fell by 22% and 11% in those two states. Findings further revealed that the lockdown

resulted in decreased household food affordability, a decline in the quality or accessibility of healthcare, and an increase in the risk of hunger and starvation (Meludu et al., 2022). A study conducted by Rogito (2024) illustrating the effects of Covid-19 on African agriculture and farm work showed that the Covid-19 epidemic in Africa has had a significant impact on workers, altering how they organise their daily activities, eliminating job prospects for farm workers.

3.4.4 Collective action and policy activism

Agricultural workers have historically been denied access to national labour protection laws in many African countries, including those that set minimum wage, limit work hours, paid sick leave, and social security (Centre for Social Excellence, n.d.). The pandemic sparked several farm worker protests in Costa Rica against their living and working conditions. The strategic allies were very significant in raising the voices of the farm workers. During the pandemic, organisations such as the Private Sector Workers Union (PSWU) amplified the voices of farm workers after learning of instances when migrant labourers, in the pineapple industry were denied access to health insurance (Voorend et al., 2023). Employers had stopped offering health insurance to minimise operational costs, which made it impossible for people to get health care during the pandemic outbreak (Voorend et al., 2023). The protest's main goal was to guarantee that workers' rights were respected by putting pressure on the employer to pay overtime and comply with minimum wage laws. It also meant that workers had to have protective gear, follow workplace rest and hydration guidelines, and implement Covid-19 protocols to prevent infection.

200 Corporación de Desarrollo Agrícola Del Monte unionised employees in Costa Rica went on strike in June 2020 to demand improvements to the company's health policies. Strategic partners like PSWU or the socialist political labour group Partido de los Trabajadores, which has an organisational presence in several packing and fruit firms in north Costa Rica, once again articulated and backed these demands (Alvarez-Echandi, 2020). In August 2020, a group of farm workers from Piñas Cultivadas de Costa Rica S.A., a pineapple farm in Medio Queso, Los Chiles, in northern Costa Rica, embarked on new collective action. The main goal was to demand that workers' rights be upheld, putting pressure on the employer to guarantee minimum wage compliance and overtime compensation, as well as to procure protective gear, abide by regulations for rest and hydration while working, and establish Covid-19 measures to prevent infection (Voorend et al., 2023).

Land occupations led by the Landless Workers' Movement (MST) have been on the rise in Brazil since the re-election of Lula to office (Harris & Ingiza, 2023). Lula has been largely supported by the agrarian

community and has been a sympathiser of the landless movement (Silva, 2023). The MST earned recognition in the late 1990s and early 2000s when it took over hundreds of private, rural properties, claiming them to be unused farmland that had to be distributed (Harris & Ingiza, 2023). Occupations soared under Lula after previous right-wing regimes saw historic lows in land occupations (Harris & Ingiza, 2023). Before June 2023, at least sixteen land invasions by the MST and other agricultural rights groups have been observed in the three months since Lula became office (Harris & Ingiza, 2023).

Farm workers in Peru also protested in 2021, calling for higher salaries. As the authorities attempted to put a halt to these protests, three people died as a result of the demonstrations (France24, 2021). The workers demanded their daily wages to increase from \$11 to \$18, but a recently approved law only offered a \$13 increase. A resolution to draft an amendment to the agrarian legislation was agreed by the government, unions, and other relevant groups set to be approved by Parliament in 45 days (France24, 2021).

In 2023 farm workers in Bangladesh embarked on a protest organised by Bangladesh Agricultural Farm Labour Federation (BAFLF). They demanded better pay and working conditions. Additionally, they forced the government to form a committee to investigate the issue and provide suggestions (La Via Campesina, 2023). The Department of Agriculture replied to the workers' protest by guaranteeing permanent contracts to every employee at Bangladesh Agricultural Development Corporation, thereby providing the workers with a victory (La Via Campesina, 2023). It is noteworthy that discussions about pay raises, piece rates, and other relevant matters are still in progress.

3.5 Food and nutrition questions

Agrarian livelihoods are closely linked to issues of food accessibility, food sovereignty, and Food and Nutrition Security (FNS), and again, Global South examples are explored to examine food access, food sovereignty, and FNS in relation to the layers of gender and youth dynamics, collective action, activism and policy as well as climate dynamics, and the impact of Covid-19.

3.5.1 Gender and youth dynamics

Research in East Africa has consistently shown a gender disparity in food access and nutritional status. Younger females are known to consume less food and have great levels of malnutrition (Ndiku et al., 2011). This is exacerbated by the burden of food-securing activities on women, which can have negative health consequences (Hyder et al., 2005). Youth food insecurity has become more prevalent, with young males experiencing an increased level of food security in a family where less economic resources are found, and

young females experiencing an increased level of food security in a family where more economic resources are present (Masa et al., 2020). The scarcity of access to resources, for example little to no capital and zero decision-making power, further constrains women's contribution to household food security.

This is consistent with Guettou and Djurfeldt's (2014) study on gender and access to food which looked at female headed households in Windhoek, Namibia. The findings of the study showed that these households only received 50% of the most crucial staple crops compared to male headed households, making female headed households more food insecure (Guettou & Djurfeldt, 2014). Furthermore, the study highlighted that marital status is critical when one is trying to determine the food and nutrition security condition of a household, with married men getting greater access to food sources.

Several studies collectively highlight the complex interplay of gender dynamics, food access, and health. Riley and Caesar (2017) emphasised the importance of a gender lens in understanding urban food insecurity, while Gething (2010) underscored the role of gender in resource access and intra-household allocation, particularly for women. Rao (2020) argues that speaking to this gender inequality is urgent, emphasising that support needs to be given to women when it comes to matters of food and nutrition security. Masuku and Garutsa (2021) underscored the importance of a post-development feminist approach to enhance women's empowerment and address food insecurity. These studies collectively underscore the need for nuanced, gender-sensitive approaches to addressing food insecurity in the global south. Addressing these inequalities is crucial for achieving food security (Park et al., 2015).

Gender dynamics play a significant role in food sovereignty in East Africa, with women facing limitations in access to resources and technology, leading to lower yields (Tagoe, 2017). The primary resource is land, with women having less access to land because of patriarchal notions that men should own land, and related inheritance rights which exclude women (Groenmeyer, 2013). Customary land tenure systems with their patriarchal emphasis also contribute to food insecurity, with female-headed households experiencing more severe conditions as a result of their inability to access land in Ghana (Doghle et al., 2019). In Nigeria, Saka and Adebisi (2021) land ownership rights among women via the process of inheritance still limits women's access to land due to cultural practices. Land is vital for production in the agricultural sector. However, access to land for women who do engage in agribusinesses continues to be a huge concern. This has substantial ramifications on household food security status because majority of agrarian households depend on farming for their main source of food.

In East Africa, FNS is known to be complex, and progress in achieving FNS slow (Lokuruka, 2020). There is a demand for comprehensive programs and relevant public policies which address micronutrient deficiencies, undernutrition and overnutrition problems (Sibanda et al., 2023). Household earnings, food insecurity, and socio-demographic variables were identified to be indicators of persistent food insecurity among youth (Belachew et al., 2012). The studies emphasise the necessity for an integrative technique to address food and nutrition security in East Africa, particularly focusing on youth.

3.5.2 Collective action and policy activism

A range of studies have explored the issue of food access in the Global South, particularly focusing on the need for collective action. Collective action has been identified as a key strategy for improving food access in East Africa. Andersson and Gabrielsson (2012) and Markelova and Mwangi (2010) emphasise functions of collective action/activism in enhancing food security and smallholder market access, respectively. They emphasise the importance of trust building, risk sharing, and pooling of resources, as well as the need for specific conditions to be set in place to build and support incentives for farmers so that they can market their goods. Georgescu and Bercu (2014) and Munang and Nkem (2011) further underscore the significance of collective political action and small-scale adaptation steps in addressing the food crisis which is experienced in the region.

The importance of lifting trade barriers in Southern and Eastern Africa to address rising food prices was raised and emphasised by Karugia (2009) as a site of activism. Trade barriers, such as tariffs and import restrictions, have significant implications for rising food prices in both the Eastern and Southern parts of Africa (Nkang et al., 2013). These barriers restrict the flow of goods across borders, leading to limited competition and higher prices for imported food products (Jayne et al., 2006). Additionally, trade barriers can disrupt supply chains and increase the costs of importing essential goods, including food products (Nkang et al., 2013).

The above-mentioned arguments on collective action, activism and policy highlight the significant role it plays across the region. Collective activism has been noted as a core strategy in making food accessible and available. Collective action/activism improves food security and creates a foothold for resource-poor farmers within the markets. The above-mentioned arguments show that without a proper collective approach, food availability and accessibility might become restricted/scarcely.

3.5.3 Climate dynamics

The Sustainable Development Goals address both climate change, and its relation to achieving the goal of putting an end to hunger, Gezimu Gebre et al. (2023) extend this, and linking addressing climate change and nutrition, arguing the necessity to ensure that there is safe, nutritious and sufficient food accessible to everyone throughout the year. They argue that countries in the Global South are more vulnerable to climate change and are therefore faced with a greater challenge especially communities who are dependent on agricultural production to sustain themselves (Gezimu Gebre et al., 2023). Those who will be hit the hardest by climate change are underdeveloped economies, such as Sub-Saharan Africa (SSA), as food security is an occurring challenge in the region. In addition, in SSA, climate change and other shocks have a greater negative influence because the human population is known to be vulnerable (Gezimu Gebre et al., 2023).

Using a case study in Ethiopia, Gezimu Gebre et al. (2023) explore the negative consequences on the agricultural production activities of small-scale farmers due to climate change, as well as their adaptation strategies, and the impact on food security. Some of the adaptation strategies farm households adopted are: (1) rotating the dates of the crops they plant, (2) planting different crops which can cope with drought-like conditions, (3) growing a variety of crops and (4) diversifying income within the household. Gezimu Gebre et al. (2023) argue that when a farm household adopts to a climate adaptive strategy, they are more food secure compared to a farm household that did not.

Nahid et al. (2021) also explore how climate change, specifically in relation to droughts, can affect smallholder farmers and how climate adaptation strategies affect households' vulnerability. Droughts have an impact on three levels: social, environmental and economic. Rural communities and agriculture, unfortunately, suffer great losses because of droughts which also impact on the global food system (Nahid et al., 2021). The impact of droughts (felt globally) can be felt in the arenas of crop production, access to water, livelihoods to food security and many more (Nahid et al., 2021).

In 2018, the World Food Organization (WFO) estimated that approximately 10% of the people in the world have encountered a severe form of food insecurity. As developing countries are increasingly faced with food security issues due to climate change, Nahid et al. (2021) argue that different investigations using newer approaches are needed, especially in developing countries, to deal with these threats, and especially for smallholder farmers.

The movement from a vulnerable state to a resilient state has been seen in recent times. However, the movement from climate-vulnerable to climate-resilient could only occur when individuals mitigated risks,

diversified their livelihoods, increased their adaptation techniques, improved communication channels and made strategic decisions (Nahid et al., 2021). Climate-vulnerable rural communities are formed when communities do not pay attention to the sustainability and management of food (Nahid et al., 2021). In other words, for a rural community to be more food secure, they have to adopt better management practices. In the instance when rural communities fail to become climate-resilient due to neglect, they are in a greater position to be harmed by droughts (Nahid et al., 2021).

The study done by Nahid et al. (2021) findings showed the following. First, factors such as the adaptation capacity of a household, the household's stability, the access to food, their income and assets, as well as their access to primary services have significantly good effects on rural households' resilience and level of food insecurity. Second, although it is assumed that a resilient household is one that has more access to social safety nets, Nahid et al. (2021) revealed the opposite. Third, other determinants of resiliency shown in this study were high education levels of members in the household, an increased employment rate, trust between each household member and the eagerness to carry on farming (Nahid et al., 2021). Fourth, poor resiliency was noted in the case where households received their main income source through direct and indirect employment in the agriculture sector. Fifth, the rural households that had a high employment rate were much more resilient (Nahid et al., 2021). Sixth, rural households that have more land to farm were more resilient because they were able to make use of crop diversification and other conservational farming methods (Nahid et al., 2021). The above-mentioned reasons indicate how the composition of a household and their socio-economic circumstances play a vital role in them becoming resilient to climate change.

3.5.4 Covid-19 and food access

This section aims to contextualise Covid-19 and its' effects on food access, food sovereignty & FNS by using case studies from different regions within the Global South.

Countries that fall under the 'low to middle-income' bracket suffered due to the downturn of the economy resulting from Covid-19 and the related restrictions in trade and travel. One study that tracked the impact conducted a longitudinal study in Bihar, India that could track the impact of Covid-19 on the diet diversity of households (Travasso et al., 2023). Travasso et al. (2023) argue that the number of individuals who suffer from hunger has doubled globally because of the Covid-19 pandemic based on their findings. Dietary diversity was restricted due to reduction in market access, loss of their incomes and price increases (Travasso et al., 2023).

Travasso et al. (2023) note that rural communities, specifically those communities that rely on agriculture are very vulnerable, and claimed their participants were malnourished and experienced food scarcity irrespective of the fact that they were engaged in agricultural activities (Travasso et al., 2023).

Diet quality can have a psychological impact. In a study in Latin America, Durán-Agüero et al. (2022) specifically focused on rural communities throughout the Covid-19 period. The aim of this study was to assess the connection between rural people's diet quality during Covid-19 and their anxiety and anhedonia levels. They found anhedonia was inversely associated with diet quality. This meant that when the levels of anhedonia were high, the levels of diet quality were low. The pattern with anxiety levels revealed the same (Durán-Agüero et al., 2022). The higher the anxiety levels were amongst the rural populations, the lower the diet quality. In other words, poor diet quality would be associated with high levels of anxiety. In addition, the results revealed that less educated individuals and males had lower diet qualities compared to females and highly educated individuals (Durán-Agüero et al., 2022).

3.6 Synthesis of key insights

Patterns of agrarian change emerge from this rapid contextual overview, although these are limited by a number of factors. Recognised scientific publications are unevenly spread across the layers and themes explored and remain thin on Covid-19, except for grey literature which mostly dealt with food value chain questions during the height of the pandemic crisis.

Evidence from country after country in Latin America, Africa and Asia shows that agrarian populations confront new stresses relating to their livelihoods. These socioeconomic and ecological stresses are worsening hardships that one generation has been transmitting to the next since the onset of colonialisation, a systemic common denominator that continues to shape experiences in the Global South today. South Africa shares this defining colonial legacy with its counterparts in the Global South. The extent to which waves of post-colonial agrarian modernisation impacted the legacies of colonial farmland dispossession and inequities is an underlying feature in contemporary case studies. Taking a longer view can help illuminate key findings.

Agrarian populations are rural residents engaged in primary crop and livestock agriculture as the mainstay of their livelihoods. Although not every resident in the rural areas of the global south is involved in agriculture, changes in the composition and size of rural residency, especially in terms of gender and age, also signal shifts in who is still involved in agrarian socioeconomic activities. Historically, labour and land,

combined with varied inputs and durable farming tools (production technologies), have been the core productive means of making a living in agrarian settings. In the 21st century, traditional on-farm labour is increasingly mixed with wage-labour, either in surrounding rural spaces, or semi/permanent migration to urban areas. The changing nature of agrarian household economies and emerging hybrid household income patterns remain a focus for much of the research presented. However, there is conceptual divergence, differing methodological criteria, institutional tensions and societal imperatives that all influence how to make sense of this question.

Longstanding inequalities that characterise land tenure and food value chains in the global south overlap with economic wealth disparities and reinforce the plight of women in the agrarian sector. As a substantial majority of the poorest small farmers, women have virtually no control over land and rarely enjoy the power to decide on land allocation and use. In addition to their on-farm work, societal norms also impose responsibility for domestic care duties on women working and living in the agrarian sector.

The sensitivity of agrarian production to climate shifts and extreme weather crises is not new. However, coping with natural disasters that are more frequent and acute, marking a qualitative shift in climatic shocks, shows up in every substantive layer explored above. The vulnerability of on-farm workers to heat stress, for instance, highlights the intersections of health threats and climate crises. Clearing rainforests to bring more productive land under crop cultivation and grazing land draw attention to the enlarging greenhouse pollution footprint of farming.

A last standout theme relates to the design and contestation over agrarian policies, showing the multiple interactions across all domains of agrarian livelihoods considered in this report. Rules, both formal and informal, are inseparable from all agrarian modes of living and set out the policies that govern land tenure and farming arrangements. Agrarian livelihoods grounded in private property and market-based principles that prioritise formal regulatory regimes. This impacts on issues of land ownership and use; accessing agricultural inputs; and FNS for marginalised communities. Country cases demonstrate that agrarian policy reforms intersect with social protection, environmental safeguards and labour market policies. How these policies impact agrarian livelihoods in practice are intertwined with the enforcement of policies through governance authorities and civil society activism. The agrarian activism of the MST in Brazil and La Via Campesina showcase the agency of resource-poor farmers, farm workers and other rural dwellers who mobilise to realise their human rights. Protests of agrarian social movements have increased advocacy for equitable and ecological agrarian policies of the 21st century.

4. FINDINGS: INSIGHTS FROM KEY INFORMANT INTERVIEWS

4.1 Introduction

This chapter provides insights from the viewpoints and knowledge of experts on agrarian household economy issues, and experiences of people that work with or are involved in the agrarian rural household space. Through in-depth discussions with key informants from civil society organisations, government and academia, this study sought to elicit the lived realities of agrarian rural households from key informants through stories, experiential knowledge, and their practise in the field. The thematic analysis of this qualitative data resulted in findings that included broad themes around agrarian households such as the significance of agriculture and other sectors to these households, circumstances that hinder household members (especially women and the youth) from improving their standard of living, changes in living conditions over the past decade, access to resources and whether they are adequate to ensure food security and sovereignty, and the extent to which, and whether the policy environment has improved lives of this sector of society. It further probed how the livelihoods of agrarian households have been and continue to be affected by shocks such as climate change, macroeconomic shocks and pandemics like Covid-19 with its related restrictions over the last decade, assisting the research team in meeting the research objectives of the study. Findings are presented by theme in turn below.

4.2 Agrarian rural household economy: Key informants' understanding

Key informants generally had a sound understanding of what an agrarian household is. They included categories such as smallholder farmers, subsistence farmers, farm workers and farm dwellers in their definitions. However, not all key informants understood that agrarian rural households' livelihoods depend on agricultural activities.

It is important to highlight that those with sound understanding were aware that it is not necessarily only farmers or farm workers, but farm dwellers and subsistence farmers who are also agrarian households, and that these households were located in rural spaces – farming areas, rural towns or rural communities and relied on livelihood activities in these areas. This is evident from the quote by Government official 1 who pointed out that:

“... agrarian household ... it's households ... in the rural spaces specifically, probably farms. So, it might be farm workers ... farm dwellers ... you know, the rural communities”.

NGO practitioner 1 understood that the definition of agrarian households is linked to livelihoods in rural areas, pointing out that:

“... my understanding of an agrarian household is someone who is residing in a rural community and mainly their livelihood is based on the activities that they are doing within the rural community, be it farming or whatever form of livelihood that they're involved in. It could be ... accommodation”.

NGO practitioner 3's understanding of an agrarian household is of the households that are involved in farming:

“I would say an agrarian household is a household that's probably has to do with cultivation. Either they can be cultivating for purpose of consumption of food, or it can be economical use in terms of selling that produce”.

The above viewpoints indicate that some key informants had a partial understanding of the definition of an agrarian household, as they knew some but not all the categories that form agrarian households. However other key informants had a vague understanding of agrarian households, associating them with vulnerable households in poor areas that rely on agriculture to for producing food mainly for their own consumption. This thinking is captured in the statement below, by Government official 3:

“...agrarian is to have those people within the farming community to help them to produce first consumption and later on to improve their livelihood by selling whatever they are producing ... First you have to do agriculture to sustain yourself in terms of food, poverty alleviation and secondly, when you start selling whatever you have to make income out of the farm, the plot, where you are”.

4.3. Living conditions of rural people

4.3.1 Gendered roles in agrarian rural household economies

Key informants had varying perspectives regarding gender roles across the four categories of agrarian households. While TA affiliate official 2 thought men dominated:

“it's mostly men dominating in the agricultural sector in terms of employment on farms. So, I would say it's males ... in the agricultural sector I would say it's more men”.

TA affiliate official 2 also expressed some specific geographical variances in relation to where men dominate:

“...in the Northern Cape and in the Western Cape it's mostly males, they are dominating in the agricultural sector in terms of employment on farms”.

Other views expressed by key informants included that women are represented in higher proportions within the agrarian setting, though not universally; that women work mostly with vegetables while men are engaged mostly in grain and livestock; and that women are mostly farm workers while more men own the land, as observed by Government official 3 who argued that:

“...[a] lot of people who are working or farmers are women compared to men, when it comes to farm workers, but when it comes to farm owners, people who are owning the farms mostly is men ... most farms owners are male”.

Thus, the gendered roles across agrarian household groups seems to be influenced by the actual activities men or women engage in. Some key informants are of the view that women largely engage in “softer” activities while men tend to do the “harder” and more intensive activities, for example, Government official 3 mentioned that:

“...women are the ones who can work with things that need ... soft touch”.

Another important aspect highlighted by some key informants about gender dynamics in the agrarian setting is that although a lot of women are working the land, their jobs are often seasonal. Women not only do farm work, but also do most of the domestic labour. Some roles are traditionally gender-specific and are allocated according to accepted social and gender normative standards. The one thing that most agreed on was the ‘type of roles’ each gender served. For instance, men might be the head of the household, but the women would be the ones working in the garden, dealing with the finances, looking after the children, and so forth. Despite this largely gender role conforming division of labour, there is some evidence of a shift evident in this quote by Government official 6:

“... in terms of the physical labour component, we're also seeing especially on fruit farms a lot of female supervisors and all permanent positions are also female”.

This points to the fact that women are moving into more labour-intensive work, and more senior positions within the work structures in some instances. These specific observations around the gendered divisions of labour in agrarian rural economies do not encompass the intersection with other themes emerging from KIIs, this section therefore gives a guide to general sentiments, as a prelude to other thematic findings which have gendered impacts described in the following sections.

4.3.2 Overview of changes experienced by rural communities over the past ten years

One of the key focus objectives of this study is to understand changes in the lives, livelihoods and living conditions of agrarian households over the past ten years. Views and observations of key informants show that there are both positive and negative changes that occurred. Some observations show that changes occurred at a minimal pace and there are instances where some key informants felt that no changes have occurred in the agrarian setting.

Some of the positive changes which were highlighted are as follows. Agrarian households have realised that sometimes the government takes too long to provide them with support. Some land reform beneficiaries, for example, as soon as they obtain land rely on their own resources, taking initiatives to improve their lives. TA affiliate official 1 pointed out that:

“... landform beneficiaries have realised that waiting for the support from the state is like waiting for the train at the bus stop”.

People in the agrarian setting are now more aware of their rights than in the past. They do not go with the flow anymore and end up questioning some of the process. People do not just accept things as they are, as pointed out by Government official 2 that:

“People [are] more educated in terms of their rights as well within those communities. Previously people were just happy with whatever was offered to them, but I think there is a better, clearer understanding and appreciation also of their own rights”.

One of the positive changes for the farm workers is the increase in wages because of the minimum wage policy. However, key informants acknowledged that the enforcement of the minimum wage for farm workers has also meant that farm owners would get a lower profit than before, and to compensate for this, most of them have to reduce their labour force if they are to increase salaries for their employees. This problem was argued to be further worsened by a reduction in labour required in farms due to technological improvement. TA affiliate official 5 pointed out:

“... dwellers on the farms have decreased because of an increase in farm evictions and the start or the emergence of rural informal settlements increase in rural informal settlements”.

However, the problems faced by agrarian households are being addressed through community organisation in the rural areas, as pointed out by TA affiliate official 8:

“... mobilisation and organising rural communities [through] a lot of advocacies [and] campaigns, targeted at evictions on farms, targeted at tenure, security on services”.

The advocacies by non-state actors together with support provided by the state seem to contribute to the positive change seen in a reduction in evictions. The government assists farm dwellers and evictions are being resolved on a greater scale, as mentioned by Government official 7:

“... the issues of land eviction are minimised due to the fact that the government is now supporting people who were abused in the farms”.

In addition, farmers are increasingly receiving more training and skills through programmes like the “Fortune 40” which assists in educating farmers, especially young farmers. Despite the support given to the youth, key informants pointed out that younger people in the agrarian communities are seeking other ways of employment and are not necessarily only finding themselves in the agriculture sector. Government official 2 pointed out that:

“... previously people used to stay in rural communities or just work on farms [but now] the younger generation seeking employment in other sectors not necessarily within the agricultural sector”.

The above observation points to the potential decline in rural population, particularly amongst young people, as they look beyond their communities and outside of agriculture for alternative sources of livelihoods. This is mainly due to the continued lack of opportunities in the rural areas. Similar to the above case, other negative experiences or observed changes over the past decade that were highlighted are mostly centred around lack of improvements in education and opportunities in the rural areas. Education levels remain low while there is a high unemployment rate, and employment opportunities remain scarce. One factor which contributes to the high unemployment, as reported by one key informant, is the fact that people have become more dependent on technology and less dependent on labour from people. Another persistent challenge is the continued seasonal employment of women. If they often only do seasonal work, what happens to them for the remainder of the year? While the National Minimum Wage Policy helped to increase the wage of farm workers, they unfortunately now have other expenses. As TA affiliate official 2 mentioned:

“...previously people didn't have to pay for rent or housing electricity, now because of the minimum wage, now people have to pay for the housing, they have to pay for electricity, which is actually very expensive”.

In the past decade, agrarian households have not been spared the brunt of shocks emanating from macroeconomic changes, global politics, extreme weather events and climate changes, and Covid-19 and related restrictions. TA affiliate official 4 reported on floods and droughts which affected agricultural activities and left people jobless, pointing out that:

“...we had an extreme drought a few years ago. The dam, which is our main source that we get our water from, it was totally dry and empty, and because of the water scarcity that we had, it had a big impact on our main economy in the Karoo. And that has resulted in a lot of people having job losses, and a lot of businesses closed as well”.

NGO practitioner 6 provided an overall effect of the challenges faced by agrarian households and the specific impact on women due to the gendered division of labour discussed above:

“There's also been a decrease in the number of hours and the ... working season due to various factors. One being maybe climate change and the dependability on the weather patterns and unpredictability of the seasons. There has been an increased vulnerability with regards to climate change because of the high temperatures that workers and women are exposed to. South Africa's the fuel cost ... [and] load shedding places a greater burden on women to collect wood, ... increases their working hours because once they come from work ... it takes longer to do the reproductive responsibilities”.

A more detailed discussion of the effects of the shocks on agrarian households is given in section 4.5, focusing not only on the impacts, but looking at how adequate the support given by the state to mitigate as well as what mitigating strategies have been put in.

4.3.3 Factors that contribute to living conditions of rural communities

This section investigates perceptions of participants pertaining to the living conditions of rural people, including an analysis of the contributing factors. Key informants mentioned multiple factors that hinder rural people from improving their standards of living. The factors include having minimal to no access to land for farming, lack of financial resources, limited or no access to markets, and lack of relevant skills. The following quote by TA affiliate official 2 encapsulates the living conditions and challenges faced by rural communities:

“... first our people need land ... because a lot of them are leasing land or if you have commonage, you don't have a long-term agreement so you will need security of land ... then resources [like] infrastructure support that is needed, proper irrigation infrastructure, you need equipment [for] people [to be] more productive ... then funding ... a lot of funding that is actually required”.

Inadequate public infrastructure often makes it difficult for small-scale framers to transport their produce from the farms to markets. This makes it impossible for some agrarian households to carry out successful farming businesses. If this is not addressed, the living conditions of rural communities will continue to lag.

Two key informants spoke in detail about the factors which prevent specifically women from obtaining a decent standard of living. The role of women in agrarian households can constrain their productive work progress, because they often take on more tasks in the household, as TA affiliate official 7 mentioned:

“...what hinders women from being active in the space that men are active, it's more of ... pre-subscribed roles of a household that you find that a female is expected to mend the house ... they have to wake up in the morning ... have to clean, they have to cook, make sure that the husband or the kids have food before they even go out to the field. Whereas for men, as early as whenever they want to go out to the field, they can be able to go out to the field. Even when it comes to

monitoring the fields, women don't have the luxury of time that men have to go to the field to go monitor”.

Other factors which prevent women from obtaining a decent standard of living was summarised by TA affiliate official 9:

“...the reasons are structural, systemic, patriarchal, but also structural challenges of institutional support, but also economic because of the neoliberal economic system that provides for labour brokers and seasonality of work and also zero hours. The living wage is an hourly wage, not the living wage”.

TA affiliate official 7 further highlighted how particularly women are being disadvantaged in the agrarian rural household economy:

“...rural communities are still very patriarchal. So, males are in control. I'll start with farming communities. So, in commercial farming communities ... there ha' been very little land redistribution. So, the land is still controlled and owned by white commercial farmers who have owned it for generations and for centuries, and they are still very patriarchal in the operations. The allocation of employment and also allocation of farm housing units ... means that women only work for certain periods of the year, sometimes it's often three to six months, which means they are economically vulnerable and dependent on male partners. And in cases where there's no male partners, their living standards are extremely, extremely precarious and vulnerable during off season times, which means they cannot build up any, generate enough resources income, to improve their living standards. Besides that, they often face evictions and once evicted they spend the rest of their lives in informal settlements and informal settlements”.

4.3.4 Necessary support to improve livelihoods for those willing to use land

Many people in agrarian households do want to use land to improve their living conditions. Key informants feel strongly that it is the responsibility of the government to provide the necessary support for rural communities. However, based on the perceptions of various key informants, the support provided particularly by the state is sometimes inappropriate for rural communities to meet their needs. In cases where the state has provided support the appropriate support, key informants shared that it is often insufficient to improve their lives.

As an indication of the inadequacy of support provided by the state to agrarian households, Government official 1 pointed out that the government has a referral system linking those who need support:

“... to appropriate services especially within government, but it might also be other community based or NGO”.

Regarding support that does not suit what agrarian households need, TA affiliate official 1 argued that:

“... there is a wave driven by the Department of Agriculture to support more people who are into commercial farming more [than] those that ... want to use their land ... for local consumption or for household consumption ... if you look at the support be it technical or the material support that is offered by the Department of Agriculture it is mainly the inputs that are ... not necessarily ... needed by the communities in those grassroot”.

The importance of consulting at the grassroots level is critical to ensure that the support given to agrarian households by the state gets buy-in and ownership from beneficiaries, as pointed out above. NGO practitioner 3 further highlights the importance of involving beneficiaries:

“I was told that there were initiatives that were started to improve the livelihoods of rural farmers and there were hubs, they called them red hubs that they opened. They are all closed down now, they failed ... they failed because the people who are in these spaces, they have not been involved. They have not been part of the discussions of how best their solutions can be brought about. Someone comes up with an idea ... they have seen it working elsewhere and then it's brought ... and it's not working. I mean in my village alone for example ... the Ukraine war should not affect us because we've got the land, we've got the right conditions in the Eastern Cape that we can grow enough food to feed our households”.

TA affiliate official 1 also pointed out that there appears to be differences in what the government seeks to achieve when supporting farmers and what the farmers want to achieve with the support from government.

“... the Department has been pushing people to become commercial farmers overnight and they are unfairly compared with ... commercial famers, when they fail because they do not get the adequate training and support to match [commercial framers]”.

The government supports farmers to eventually become commercial farmers, but that might not be what the farmers wish to become, as pointed out above. TA affiliate official 1 further mentioned that the support from the state is not always enough, arguing that:

“... they also don't have enough extension officers if they can have more extension officers who are adequately trained. Also not imposing the ideas on the communities because that is one of the biggest challenges because they will find people who area already farming in their own way, when they come, they got their own agenda that they are pushing and imposing on those communities. It is always a challenge because ... of power relation because communities are always tempted to buy into [those] ideas because they got the beg and the resources”.

In addition to the challenges highlighted above, the respondents explained that there is a need for skills development that is required for agrarian rural households to thrive, for example TA affiliate official 2 mentioned that:

“And then the other thing is in terms of skills development, they need [skills], you can't just farm”.

NGO practitioner 3 also lamented the absence of skilling people with knowledge about agriculture from a young age:

“I’m so sad because when I was growing up, when we were at school, we used to have agricultural classes. There is a lot of things that I learned from school not at home that are pertaining to agriculture, but we don’t see those classes anymore in our schools. Even [the few] that [still] do, you’ll only find them in high schools. But if we are growing people who are going to farm, and they should learn when they are young and growing up with these things”.

Another limiting factor is the lack of business and financial skills, making it hard for agrarian households to advance their farming business. Their sentiments about skills development are further expressed by NGO practitioner 2:

“I’ve got an example of a young farmer. They had about a hectare of land that they were working before Covid. She was selling her produce to the supermarkets ... The whole operation died because she was not well-versed when it comes to business. Of course, when you are running a business, you do [need to] have savings. Obviously, she was not saving anything, and she [had] even extended her operation from crop production and then she started livestock ... when Covid hit, unfortunately she had to sell those cows next to nothing because she had to keep up with the school fees and all of that”.

TA affiliate official 1 mentioned that the state’s support is defragmented which could also hinder the improvement of livelihoods:

“...the other issue for ... the department coordinating their project not working in silos because that is what we have been seeing especially in the province you find the Department of Health supporting people somewhere with the crop production, but they will be doing that on their own without involving the Department of Agriculture and the local municipalities in extension services as well”.

In conclusion, we can clearly see that there are still various supporting structures needed to improve the livelihoods of agrarian rural households, specifically those households who are willing to use land to improve their living standard. Unfortunately, this is hindered by lack of finance and other resources, inappropriate and insufficient support from the government, and not enough skills development programmes. One main point made by key informants is that for change to occur, grassroot level consultation must take place.

4.3.5 Importance of agriculture (and other sectors) to rural households

Almost all key informants acknowledge that agriculture is a critical sector, especially for rural households. Many key informants concurred that agriculture is important in the lives of people, first as a source of food, as pointed out by Government official 7:

“... without agriculture, there is no life. So, we can definitely say without agriculture, our country will not be where it is today. Even during Covid ... we were actually declared essential services. It is because ... they knew that if they can stop farming then people are not going to have food”.

Government official 2 noted that agriculture drives the economy especially in regions where sectors like other sectors are not significant:

“But the agricultural sector is important because the economy is stimulated by agriculture and in certain areas [it] is the main contributor to the economy, even though agri-processing is ... also important, but most people are actually involved in primary agriculture ... it also depends on where you are actually living ... in the Western Cape ... it is an economic driver ... it obviously stimulates the economy”.

Agriculture was deemed a key sector in creating jobs in rural areas, with Government official 1 pointing out:

“I would say it's a key component ... it is the whole value chain ... it provides opportunities, opportunities of income, but also opportunities of development ... and if you look at the rural space ... agriculture is the job creator, agritourism is a job creator, agro-processing is a job creator”.

While the importance of agriculture in the lives of rural communities is undoubted, key informants acknowledged the importance of other sectors in supporting rural households, particularly for those who do not want to work in agriculture. Government official 3 mentioned:

“... truly speaking a child of a farm worker, he doesn't want to be seen himself as a farm worker unless when there is no other alternative”.

Also, not everyone can be absorbed in agriculture, as pointed out below by Government official 5:

“... [not all] people in South Africa must be involved in agriculture ... the rest we must find jobs in other sectors”.

Agriculture is of great importance to agrarian rural households. Besides providing employment, its main purpose is that it is a food source for agrarian rural households. Agriculture contributes greatly to the

economy in regions where other sectors are not as visible. However, other sectors need to be acknowledged because they fill in the gaps in regions where agriculture is not as dominant.

4.3.6 Youth perceptions about agriculture

Key informants attributed the lack of youth involvement in agriculture to negative perceptions about the industry and limited knowledge. Young people believe that agriculture is solely about tilling land and getting dirty although there are other professions in the sector as well, including those in science, engineering, and finance. Government official 5 highlighted:

“...[youth] get the perception and attitude that for in agriculture you work with a spade and a fork you know and it very hard work”.

Despite the unfavourable perceptions about agriculture, a significant shift of youth getting involved in agriculture has been observed in the last few years. The number of young people entering and participating in food production - whether it be through crop or livestock production - has significantly increased. TA affiliate official 8 explained that:

“there has been a huge shift though in terms of young people also coming in and being involved in food production, whether it's crop or livestock, and I did touch earlier that we're seeing because there's limited land for usage, there are some conflicts”.

The government also runs programs for young people, but not everyone can take advantage of these programs because of information sharing gaps and challenges with getting support. This view is captured below by NGO practitioner 4 who pointed out:

“... there are programs, or there is one program that was developed for farmers, but it simply targeted mostly young farmers. but the challenge with, that program that targeting young farmers that they are not much farmers who are young. So, that means somehow some way there are people who got access to funds but wouldn't actually use them, in the agricultural setting or actually during the production itself”

Youth participation has been presented to be further impeded by limited access to resources and information dissemination. NGO practitioner 1 highlighting:

“... the youth, many times, the youth, when I look at rural areas, they don't have the things that encourage them to have a future like libraries. There are no libraries here at the farms. Maybe that would make it easier to study”.

They are located far from towns or government services; therefore, they don't have access to opportunities. In addition, they lack resources like libraries that might inspire them to have a future and educate themselves about the sector.

4.4. Access to resources and food and nutritional security (FNS)

4.4.1 Adequacy of resources required to attain decent living standards

The second major theme in the KIIs revolves around the issue of access to resources and FNS among agrarian rural households. The study sought to understand the experiences of ARHE members in their attempts to access various resources and services and how those are distributed between men and women. The key informants' diverse interpretations of the question of access and the extent to which resources are sufficient for a decent standard of living underscore its complexity. The key informants shared concerns about the adverse effects of inadequate support on living standards. Government official 2 argued that:

“There's a specific unit that deals with subsistence farming and so on or with the farming side of it ... but in whether the resources are adequate, that's always questionable”.

The above statement highlights that, despite the government's efforts to provide subsidies and various NGOs' initiatives to improve accessibility, it is evident from the key informants' responses that significant barriers persist. Government official 4 concurred that for example:

“If you apply for ten bags, if they approve your application and they bring only three, it is not enough at all”.

One of the most important factors that could ensure decent living standards for agrarian households is adequate financial resources, as pointed out by Government official 8:

“The most important is financial resource, because if you have got the financial resources, you can get hold of other related resources”.

Access to financial resources is considered inadequate, leading some to seek alternative ways of sourcing funds, as reported by TA affiliate official 1:

“I think this also presents an opportunity for farmers to also push their agenda because they can also ... through their formation ... start popularising what they are doing”.

Government official 4 concurred, pointing out that:

“They need to save money so that they can subsidise or maybe just to contribute to whatever the government is providing”.

The insights of the key informants above, who are involved with various civil society organisations, highlight the importance of collective action and financial resources in the success of agrarian rural households. Furthermore, despite the availability of various assistance programs, such as government

subsidies and NGO-led initiatives, there also seems to be a significant gap in the number of people accessing them. Notably, women are said to be more responsive to help than men in most cases. Government official 1 mentioned:

“...it's probably 52% the woman that comes and asks for that service ...in terms of the social things also I would say it's slightly more women that would be asking”.

Another issue the key informants raised is farm workers' dependence on their employers for essential services such as transportation to get proper food and health services in areas outside the farm. Not only are the agrarian rural households isolated by location, but they also have limited mobility, which impacts their attainment of food security. Government official 2 notes:

“...you'll often find that you know on a weekly basis the farmer will take them to town to obviously get what they need for the week”.

TA affiliate official 6 highlighted the limitations of agrarian households:

“People buy what they can afford. I mean they really buy what they can afford. Can you imagine having to come to town with your whole pay? So, people buy the necessary ... if you're lucky, you get some meat. Most people don't have refrigerators”.

Limited resources mean often mean making choices to buy cheaper, less healthy and more accessible food such as bread and pap. The mention of not having refrigerators also underscores the challenges faced by individuals with limited resources as they cannot purchase food that they cannot preserve.

Other challenges mentioned were the lack of quality schools in rural areas, so young people will not receive a good education and will not be inspired. Key informants suggested that the surroundings and low-income earnings also drive young people's lack of inspiration. There are also long-standing issues of crime and substance abuse in the community that affect agrarian rural households, as pointed out by Government official 1:

“...social ills that are impacting our communities whether it is crime related with it is due to umm, just the, I want to say a decline in social fabric”.

One way of addressing these issues is raised by one key informant who is a researcher who mentions a centre in their community where youths can access information about different sectors where they can find employment and potentially improve their lives. Initiatives like this seem beneficial for the community, especially the value of creating spaces and opportunities for youth to expand their knowledge and skills, ultimately contributing to their personal and educational development. TA affiliate official reasoned that:

“So, if the youth can be given access to information, given information, if there would be maybe libraries or centres like a Thusong centres where uhm youth can get access to information about different sectors”.

Two key resources for agriculture – land and water – were raised by a number of key informants. Without secure access to either, it is difficult for agrarian rural households to sustain their agriculture related businesses, which in turn threatens their livelihoods:

“Small-scale farmers want to farm, but to get the water license is your it's so complicated to get even a water license for small scale farmers to actually produce or to get the water license to produce they need important.” (TA affiliate official 2)

“... so, a lot of them are farming on land that that ..., they don't necessarily have any security like municipal land and so on. So, the problem is that if you struggle to find someone investing in that business because it's high risk ... the one or the other one is access to water.” (Government official 6)

“Water is one of the measures because there's also inequality at that level, you know, we've got these experiences of people that have given land, but no water.” (TA affiliate official 3)

“I would say water resources, land to be able to work, work the land and, some of the comrades mentioned the other day that even the seeds are a problem.” (TA affiliate official 4)

“I would have to mention water: Water is a basic need that most people, not only in the rural areas but also in the townships and all the other areas, need.” (NGO practitioner 4)

It also seems there is a lack of support from the municipalities because issues they raise about water and the awarding of licenses are their responsibility. This range of limited resources raised by key informants combined create significant barriers for agrarian rural households to build and maintain agricultural practices that are well supported and enable FNS.

4.4.2 Accessing resources to address food security and food sovereignty

One of our key informants below who is employed as a researcher emphasised the need for agrarian households to learn how to grow vegetables for themselves to control their food consumption, achieve food and nutrition security, and save money. Government official 3 stated:

“We encourage farm workers, including anyone, [to] try by all means to make a garden for yourself because the money that you could be using to buy vegetables you are now using that money for other commodities”.

Though some key informants mentioned the lack of available seeds for food growing, others cited the Department of Agriculture's support of farmers through seedling supply and technical support. This is managed through local agricultural advisors who conduct training. The importance of this empowerment is

vital to foster food security and self-sufficiency. NGO practitioner 3 mentioned the input support provided to farmers to increase food security:

“... for food security, we have the Department of Agriculture, which is obviously the one helping farmers in terms of getting seedlings. Sometimes they open for applications, then people can apply, and then they will get access that way”.

Government official 7 explained the some of the services provided to farmers by the state as:

“... we have got our agricultural advisors who are with our farmers on a daily basis to make sure that they teach them, they train them, they skill them with everything, what they want”.

Despite these programmes, key informants also highlighted that seeds were often scarce resources.

4.4.3 Distribution of resources between men and women

When it comes to the distribution of access to resources between men and women in agrarian households, the key informants observe that there appears to be some progress towards equality in this regard. TA affiliate official 3 argued:

“...there is a bit of a of a difference ... if you could look at the number of producers ... there is a lot of consolidation of women ... and they are accessing ... some of these of these resources in their own right”.

This was supported by Government official 6 who pointed out:

“Previously, it was just that the male in the family [who] was the 100% shareholder. We're seeing a lot more the way businesses are registered females also have been shareholders in that business and ... we are seeing a lot more family businesses with the wife and the husband farm together”.

NGO practitioner 5 was in agreement with the above perceptions, mentioning:

“There's a whole lot of change in the rural communities from the time I started extension work that was 2012 till now. So, we can say in the space of 10 years, the living conditions have now turned in a way that women are now, I would say more in control”.

Some key informants highlighted that this could partly be attributed to the complex nature of household composition in South Africa. Key informants also expressed their experiences with women and men's land access and ownership, with Government official 4 arguing:

“It is equally distributed. You cannot say men are getting more or they are given more priority when it comes to land distribution; no land is given equally”.

NGO practitioner 3 shared the same sentiments, pointing out:

“... in terms of ... accessing resources ... it [is] perhaps evenly distributed between the men and women”.

Some key informants speculated that this shift toward equal access may be because of programs that may predominantly target women, possibly indicating an effort to address existing gender imbalances in the country through resource distribution, NGO practitioner 4 argued:

“I know that ... sometimes programs that have been developed, they would [give preference for] women as saying there is a program that is going to be maybe funding farmers and it would be basically mostly women.

An important view by one key informant who is a researcher is a shift in farming responsibilities from men to women due to the absence of men in some households. This further indicates the changing dynamics of farming and responsibilities in agrarian rural households. The shift from men being the primary farmers to women having to take on the role due to the absence of men was noted. NGO practitioner 2 mentioned some women’s limitations regarding their physical abilities and their impact on their farming activities.

“In the previous time ... there were men farming ... now that many of the men are not there, there are many households that [no longer farm] because the women don’t know [how to] ... farm. [As a woman], I farm what I have the strength for ... and end there ... I can’t go to the other [things]”.

Overall, this theme has highlighted the challenges related to not having adequate resources to achieve and maintain a decent standard of living in agrarian rural households. These challenges include limited access to financial resources and support for farming projects, unequal access to assistance programs with women being more responsive, the reliance of farm workers on employers for essential services and limited mobility, and the impact of financial constraints on food purchasing decisions and access to education opportunities for young people in agrarian households.

4.5 Policy environment

This section explores perceptions of key informants on the extent to which key policies that are relevant for improving lives of agrarian households are gender sensitive, as well as the degree to which rural communities are included and involved in the processes of formulating policies which affect them.

Key informants noted a variety of policies in place which protect rural households, these include:

- Land Reform policy which aimed to allocate 30% of farmland to black people over a 20-year period, develop black commercial farmers, and offer support mechanisms.
- Extension of Security of Tenure Act (ESTA) aims to protect farm residents from eviction and enhance long-term land tenure security.
- Minimum wage policy protects workers against exploitation and currently ranges from R25.42 to R27.58 per hour worked.
- Agricultural policy aims to minimise market access hurdles placed against South African agricultural exports and protect local agricultural sectors from unfair trade practices.
- One Hectar One Household launched in 2015 aimed to enhance security, food security, and improved rural livelihoods.
- Extension Services and training programs have also been enhanced to cater for smallholder farmers.
- Comprehensive Agricultural Support Programme (CASAP) seeks to offer post settlement support to the intended beneficiaries of land reform.
- Maputo Declaration established in 2003 created to enhance food security and nutrition, as well as improve income in Africa's predominantly agriculture-based economy.

Key informants pointed out that in theory, policies prioritise the poor and disadvantaged, youth, women, and people with disabilities. However, in reality, they do not have significant impact on lives of those living in rural areas and are inadequate in addressing historical injustices. There is an indication from the respondents that there is a historical and structural problem with policy implementation, the policies are there but they are not properly implemented.

These policies are also criticised for being positively biased towards commercial farmers, for example, to compete in the market, smallholders must adhere to regulations that they are unable to satisfy. For smallholder farmers to sell in global markets or to big supermarkets, they need a Good Agricultural Practices (GAP) certificate which is difficult to get, barring them from larger markets:

“When we look at agricultural policies, a lot of them, they are much about large scale production, not so much about small scale production. It doesn't, they do not promote that”.
(NGO practitioner 21)

Gender sensitivity in policies seems present in the documentation but faces the same problems as all policies in that this is not well implemented, key informants pointed out that gender sensitivity in the policies are often complex and implicit.

Inadequate involvement of the people most affected by the policy in its formulation was raised by multiple key informants. It is believed that people are not really consulted during policy formulation and that decisions makers are ignorant of realities of people on the ground. Government official 5 noted:

“Those people ... are not consulted, the policies are developed somewhere else ... people who are affected are not actually involved, they are not engaged ... they need to make sure that when they develop ... policies, they engage the affected”.

The issue of the households’ involvement in policy development also links back to the issue of policy implementation. There is a need, according to the respondents a much more efficient way of implementing and tracking policies. NGO practitioner 8 argued:

“It doesn't seem that government is taking the initiatives from the ground level and to take part in or the initiative being implemented. It's just um, exercise. That's being done because it's part of the regulation to do that”.

“There are processes, there are processes that are there, but these processes need to be transformed”.

A government official 15 decried the inefficiencies brought about by policies by providing an example of delays in providing support to people in the agriculture sector during adverse weather events.

When farmers are experiencing some disasters such as flood, heavy rain and all the like and they lose their animals, we, it should not take a year because of paperwork and PFMA things, there should be some money which is going to be a relief funding, which goes just like gift of the givers”.

Some key informants contend that these policies can assist the intended beneficiaries. They claim the policies are not only pro-poor but also gender sensitive and accommodating the previously disadvantaged populations. They allow for people to access land and accelerate land reform:

“... there are policies that are encouraging gender balance and also even distribution of resources to all the groups, community groups of farmers. For example, the one that ... [is] encouraging farmers to be supported in terms of their PDI, we call it Previously Disadvantaged Individuals. That policy assists us in terms of the criteria in which we use to accept the applicants. When farmers are applying, we identify them in terms of are they previously disadvantaged, that is number one, which gender are they falling under”. (Government official 19)

Another key informant however, pointed out that the policies are important for addressing the intended problems, but the pace is slow. NGO practitioner 21 explained that,

“... we need to upscale it a little bit. So, I'm saying, yes, people's lives have been changed, but not to the extent that we expected. I'll say we are at below 50% of what we could achieve with all these policies”.

While policies might be achieving their intended purpose, they also have a challenge:

“There is a lot of policies that affect them, and unfortunately, these policies, also overlap, or are in conflict with each other. There is not a clear framework that provides a framework on how to deal with all the different categories”. (NGO practitioner 21)

NGO practitioner 21 further gave an example explaining:

“... these policies conflict with each other. In farming communities, different rights exist, and you have your ESTA occupiers, you have your farm workers, you have ... the ones that have lodged claims, you have ones that have not. There is just a lot of rights that exist in that community, and each of them ... is covered by different laws or policy which conflicts with each other. So, we do need to have a framework that ... sort of provides a guide on how to assist with all those different rights that exist”.

Key informants have noted various gaps with the existing agrarian policies. They do not really assist persons who live in rural communities, as noted by NGO practitioner 14 who said:

“I notice most of the times rural households are regarded as people who are growing food for consumption, not for business purposes. So, I have not heard of any policy that will accommodate such people when they are talking about farmers, they will only regard farmers as commercial farmers”.

Policies need to focus more on small-scale farmers and the different approaches of growing food. They do not have indicators to quantify how gender sensitive that policy will be, how pro-poor it will be, and what impact it will have. That type of information is missing. The policies are further perpetuating the disparities between the rich and the poor:

“I think our policies actually create a divide between the rich and the poor. It creates a further divide, because we're supposed to provide support for the commercial farmers you know. And give them conditions that they must work with the emerging sector; and also provide, the necessary support for the emerging sector”. (Government official 18)

Policies therefore are not addressing the intended beneficiaries, they only highlight pertinent issues in the preamble, when it comes to giving explicit details and depth of the policy, it doesn't mention the relevant things, as pointed out by NGO practitioner 24 who said,

“... there is the general land reform processes which include restitution and redistribution. The problem is ... although redistribution is acknowledged in the constitution ... when the act is

operationalised and the policies are operationalised, there is not sufficient provisions ... to deal with the gender equality”.

The distribution of land to black farmers has also been at a slow pace. There is no post settlement plan after giving a beneficiary a farm as NGO practitioner 21 explained that,

“you'd find that even though people will continue to produce, but it's still on a very small scale, and that is largely because there is no post-settlement that is provided for them”.

In addition, when the farm is transferred to a new owner, it is not transferred with the resources it had, NGO practitioner 21 giving context,

“For example, if that farm was producing milk, a dairy farm, so when the land is bought in most cases is that it does not come with everything that existed then, it doesn't, it means that people still have to invest in the infrastructure and other things. And unfortunately, our communities do not have those kinds of resources.”

Lastly, the existing policies do not promote agroecology and sustainability, as noted by NGO practitioner 21:

“They also do not promote agroecology. They do now talk about climate smart, it does not talk about a small-scale producer and, or an organic or an agroecological farmer. It does not promote those type of things. I will make an example of the climate change bill. It makes a lot of reference to the high cooperatives, you know. It talks about, it does not, for an ordinary person, a farmer; they cannot relate to it. It seems as though climate change does not affect them because of the language that has been used and the reference to commercial farming”.

Current agricultural policies lack consideration for environmentally sustainable farming practices and fail to incentivise the adoption of agroecological principles. A paradigm shift is necessary, prioritising climate change mitigation and adaptation strategies alongside the promotion of agroecology and sustainable agriculture.

4.5.1 Policy implementation

As noted above, the key with policy lies in their implementation. Policies can be launched, but when they fail to reach ground level, they become a futile exercise:

“... you can have good policies, but if those policies are not translated into the implementation and use of those policies, then they remain useless, and communities won't benefit if you're not implementing them”. (NGO practitioner 25)

Currently there is poor implementation of the policies and government need to invest in adequate monitoring systems:

“I suggest one of the things that we are doing wrong is our monitoring system, our monitoring system is not that good”. (government official 4)

Aside from lack of implementation, lack of motivation and care on the part of implementers is a problem:

“... if you study, if [you] analyse the implementers, government of official implementers, just in the areas that we deal with, the police, rural development officials, department of labour officials with the farm workers, all the senior positions are males, and they basically just function. There is many of them without passion and functionaries... So, for many of the officials, it's about getting a higher position, getting a bigger salary, and it's not about bringing about work, it's also maybe sometimes it is not in their power, but they just replicate the inequality that we see within our society”. (Government official 4)

This lack of motivation has real impacts for the lives of rural households, who have to fight for what is legally and policy mandated. This example shows that in some instances, the communities have to rely on courts to compel government to implement the policies:

“... so, there was a case ... with the legal resources centre that was looking at compelling the department to work on labour tenant claims. For some reason, the Department of Rural Development and Land Reform had stopped processing those claims, and in 2019 there was a judgment that was given by the ConCourt compelling the department to settle those claims”. (NGO practitioner 21)

The ineffectiveness of policy implementation has necessitated communities resorting to judicial intervention to compel governmental accountability and policy implementation. While litigation can be a successful mechanism for pressuring governmental action, access to justice remains unequal, disenfranchising communities with limited financial resources. Therefore, a more proactive approach is required, wherein governments prioritise collaboration with communities to ensure effective policy implementation.

4.5.2 Gender sensitivity of current policies

A number of initiatives have been set up in an effort to encourage women to work in agriculture. In the traditional councils that make decisions on land in rural areas, women are supposed to make up two fifths of the membership, and while the numbers may be present, they are not always in positions of power:

“... you can have a policy of being gender sensitive, but in a cooperative, after people have allocated positions in a cooperative, they themselves come and say, no, this is our chairperson,

and each time, it's a man, but the people who are doing the work are women". (Government official 18)

NGO practitioner 1 argued, this strategy has not been successfully implemented, and councils are still predominately made up of men:

"... from that traditional council 40% need to be women but I don't know any I've moved around the province, I don't know any that has got at least more than three women I their traditional council, I've never seen one so they are always male".

These examples are another demonstration of the ways in which policies are not effectively implemented to make the changes they seek to foster.

4.5.3 Agrarian households' involvement of agrarian households in policy formulation

There are varying views about whether agrarian households are involved in the policies that affect them. One challenge is failure to provide sufficient time for discussion, and the way that 'consultation' is largely in the form of affected household members passively listening to presentations without actively participating or expressing any concerns and objections. Another challenge is the policies' technical vocabulary, usually in English not local languages, which makes it difficult to grasp. The intimidating nature of 'experts' presenting already developed policy ideas to the household members most affected can stifle free engagement. This means that effectively policies are developed from top down, not bottom up.

Some key informants have highlighted that the people are not really consulted during policy formulation. They contend that those who are impacted by policies are not included in their formulation and that those who make these decisions are ignorant of the realities of the people on the ground. This sentiment was shared by various key informants. Government official 5 explained:

"Those people they are not consulted, the policies are developed somewhere else and then the real people who are affected are not actually involved they are not engaged when those policies are developed, they need to make sure that when they develop such policies, they engage the affected".

NGO practitioner 14 concurred:

"... people are never given an opportunity to participate in them so that they can bring in their personal experiences and obviously find ways of policies that are going to address these problems that they're faced with".

In addition, NGO practitioner 23 emphasised the above viewpoint, explaining:

“... these agrarian communities do not play or do not contribute to any policy formulation because they are not uh involved in the decision making or the policy formulation processes. They are not taken into consideration. Just the government just impose regulations and policies to us as agrarian communities”.

Despite these views, NGO practitioner 21 notes that there has been an improvement in public involvement over the last 20 years:

“... the communities have been really involved, and they have been advocating for alternatives. It is amazing how rural communities are organised and it's something that you wouldn't have seen many years ago”.

And their view is supported by government official 18 who notes the growing demand from communities to be properly consulted:

“... you'll find you know, in those commissions, communities uh, getting involved in the formulation of those policies. In instances where you want to pass a bill or an act then you're going to have formal roadshows where these communities are consulted about these policies”

Some examples of people's involvement in policy formulation sessions with successful outcomes were highlighted by NGO practitioner 21:

“... you would remember the high-level panel by the former president Kgalema Motlanthe, where the government was really looking at reviewing some of the laws and policies that are related to land reform or agrarian reform to check if they were working or not. And there was a whole document that was published, so there were public consultations that were happening throughout the country, really looking to check if these policies have been implemented properly and are they working for the people or not. And there were recommendations that came from that, that have been taken forward”.

Government official 19 concurred, also citing their extensive consultations with farming communities explaining:

“So, in terms of their involvement, we organise farmers. Firstly, in the areas where we're working in, we organise them, they organise themselves in terms of their farmers' associations and also their areas where they are working. So, when there are hearings now the hearings usually are rotating area by area and then maybe there will be in a form of a local municipality. So, if there are any local municipality, the wards that are around that municipality will send their representatives uh to the hearing so that they can express the views of the farmers. So, in that way, farmers are engaged and also are involved in terms of drafting these policies”.

Despite these examples of consultation, there are still many flaws in the process. Some key informants argued that such sessions are essentially checklist exercises that have little bearing on the policy for several

reasons. Government official 18 contended that in certain cases, officials learn that the policy would accomplish the opposite goal despite widespread public engagement:

“As an official, you can write down a policy which you realise after three months of having written it, that no man, I didn't actually calculate the balance of forces and actually this policy is going to achieve the direct opposite. So, these communities, they participate in the drafts, in making input to the drafts that they are being provided with... And not really in what will help them ... even us as officials, we realise ... after having been involved in the formulation of a policy for eight, nine months ... when we start to implement it, we actually see that there are these gaps that we didn't consider, and they are making it impossible for us to effectively implement this policy. So, the gaps are there, but as far as participation is concerned, yes, uh, there are serious efforts to involve communities and they're getting involved, but the question is, are they being involved effectively ... that is the difficult question that we need to answer”.

NGO practitioner 10 notes that despite the existence of these public engagement platforms, the voices of the people will never be able to affect the direction of policy since power and influence are vested in a select few:

“... the voice of the marginalised ...remains you know there are some silences ... in terms of whether ... they really make impact on the final development of some of these policies because we have got number of interest groups around the issue of land for people that are defending certain rights that they have on land ... so really the efforts are made ... to try and bring about pro-poor but again in the end ... the power ... dictates the policy direction ... across all levels”.

The lack of real and engaged participation while creating policies results in the conclusion of policies that do not address the issues faced by agrarian households, especially if they are developed by those who are not knowledgeable about ground realities, further perpetuating exclusions:

“... obviously if everything is abstract to you who is making this policy, you do not have like a complete understanding of what you want to come up with, then it's not going to assist. Bring us in but come to where the problem is and then we can talk and come up with things that are realistic, not things that are theoretical and then where you put them into practice, they're not working”. (NGO practitioner 14)

NGO practitioner 14 recalled this mismatch of policies that do not speak to challenges of agrarian households but results in further exclusion of the community:

“For example, now we've got, like I think it's an act where they're telling us we can't save our seeds, we have to go and buy seeds each and every time we want to grow any crops. So, those are the policies or whatever they choose to call them are not in favour of helping us to grow as people because even though people are not like going in the fields, there are people who are growing food in their homesteads for the purpose of doing business ... there's a policy that says we should be registered in a farmer register for you to access assistance from the government. For the longest time, people who are farming in villages have been excluded in that register”.

Consultations reach certain groups but fail to reach others for a variety of reasons. One of the reasons that consultations do not take place in certain geographic regions is a lack of adequate resources. In some instances, communities have no knowledge about the existence of these policies:

“... my work as the development desk is for me to educate my farmers on different policies that affect them as farmers, but I do not have the capacity to go the whole of KZN and just concentrate on a specific act, so that people understand”. (Government official 22)

When it comes to information sharing, small-scale farmers have disadvantages in comparison to commercial farms. Commercial farmers have the most modern technology means of getting information, whereas small-scale farmers are less technologically advanced and rely on traditional methods of information exchange:

“Even if I were to send it on WhatsApp, it's just a documentation if I need input. Whereas with your big commercial farmers, you send them an email, you send them a survey and ask them for an opinion within a week it's there. But with rural community it's difficult. I would have to drive to the rural community, and you'll find that [someone] will come to me ... as a development desk officer and ask me a couple of questions around a certain policy, and then I just think from the top of my head that okay, this is what my farmers would say, whereas there would be somebody who is brilliant. A granny from [Mtuba] who is brilliant could have more impact. So, it is the difference in technology, in technological advancement for our rural community, that an email is a foreign thing to me ... I have a smartphone. But dynamics like doing a Microsoft form is difficult for them, you see? So, it's all those insights that people, they can't be involved because of the different dynamics, therefore needing a funder, or government to do the work and say we are calling you for an [Imbizo] in your local hall because we are concentrating on that, and I see a gap that needs to be filled so that farmers are more, have a voice in, in the policies that affect them”. (Government official 22)

This highlights how access to resources plays a role in information access. Small-scale farmers residing in informal settlements face a significant disadvantage relative to their commercial counterparts. This disparity stems from a lack of material resources and limited exposure to communication technologies.

4.5.4 Involvement of community movements in policy development

Divergent opinions are expressed among key informants regarding the ability of community movements and civil society to shape laws that impact their constituents. Those who concur point out that their participation in the formulation of policies can have a significant impact. Over the years they have contributed to some of the reforms in the agricultural sector, and their participation in the policy-making process has significant impact on agrarian rural households. They play an essential part in amplifying the voices of those affected by living and working conditions, wages, and the treatment of workers generally:

“... there is a lot of advocacy that has been put towards. But there is also a lot of a number of other things that have been involved in campaigns, targeted at evictions on farms, targeted at tenure security, on services, provision of services on farms ... I think ... there has been a shift in terms of commitment, and that has largely been because of the advocacy work that has been led by NGOs like AFRA in terms of looking at what shifts can policy and the laws that exist ... contribute towards [land policies]”. (NGO practitioner 1)

NGO practitioner 8 argued that the government provided narrow solutions to the broader problems while NGOs bridge that gap:

“... it's sometimes difficult to bring the change within government because it's like they are looking just at the economic side of some things and not in terms of the humanity of some policies”.

Furthermore, civil society also utilise judicial processes to enforce policy implementation and protection of the vulnerable people:

“... for example, where all the TA partners supported the court case of the labour tenants and the applications of access to land ... but there has also been other cases where, there has been joint support from local communities, solidarity from other TA partners to bring about precedent-setting cases that will lead to policy changes or at least implementation and interpretation of policy”. (NGO practitioner 24)

Civil society was also said to be very instrumental in mobilising communities to get involved in processes that involve policy formulation and educating communities about the policies:

“... there has been a huge growth in terms of mobilisation and organising rural communities. And in this case Tshintsha Amakhaya has played a very important role in organising or bringing communities together in one space where they are able to look for alternatives and learn from each other”. (NGO practitioner 21)

Rural communities are leading the charge in the struggle for their challenges and have amped up their mobilisation initiatives.

“I think one of what has been a great achievement for rural communities is how organised they are, and that was a challenge in the past and Tshintsha Amakhaya has been able to sort of coordinate that space for them that they are able to come together and learn from each other and look at campaigns and delivering those in solidarity.” (NGO practitioner 21)

Civil society needs to go beyond mobilising communities, to also need to also mobilise themselves and unite in calling for change as more voices may bring better impact than one voice:

“I would say even as an organisation, we do not have that impact or the voice, a loud voice for us to change certain policies... but if we were to bring different NPOs, different NGOs in one

room and discuss the vision, we would be able to assist the development”. (NGO practitioner 22)

Nonetheless, other key informants feel that although they can have an impact, government official 7 notes government should be in charge of developing policies, not non-state actors:

“They can play a role, but I think these things must be done to a greater extent by government departments, in a, in a focused, program, in a focused output that is needed”.

Not everyone agrees, NGO practitioner 8 thought NGOs should be leading the process:

“It will be better if they have got policy dialogues of their own, arrive at certain policy positions and invite the state or sell those to the state, I think they'll make a much better impact you know? When they are on their own and they are making, they're engaging themselves in policy discussions outside of the influence of the state or of officials”.

Although civil society may participate in policy consultation processes, their positions might not be consistently reflected in the final policy. This creates reluctance in taking part in these processes and loss of confidence in these processes, as NGO practitioner 11 lamented with frustration:

“If the government can take us more seriously on the ground just once, then we will feel positive to contribute, to give or to share our opinions to contribute to the decision-making up there. But they have already created a setup where they make the decisions up there, and we must just accept it ... if they can for once just work on a living wage and not a working wage. If they can be lesser Marikanas, if there can be lesser mining, disadvantaged mining communities, lesser people dying, and more people being able to breathe, to live freely, to be able to farm whatever the case may be, depending on what your need is, then we will feel more comfortable in participating in government processes”.

This highlights the need to decentralise these policy participation processes, make the environment for civil society conducive so they can express their positions freely and their inputs be taken seriously so they can effect change in policy formulation.

4.5.5 Migrant workers in the agricultural sector

Another issue that came up from the policy debates is the issue of migrant workers in the agricultural sector. Whilst laws protect South African workers, there exists a policy vacuum regarding illegal foreign immigrants working in the farms. Not only are they facing vulnerability due to their status, but they are also subjected to abuse. To avoid paying the prescribed minimum wage, it is believed that farmers employ undocumented migrants, and their immigration status exposes them to risks and exploitation:

“... some of the foreigners are not documented so they can't go to Department of Agriculture and say farmer x is not giving me the money that I want because you are illegally in the country”.
(Government official 4)

In addition, farmers capitalise on the ignorance of immigrants about the minimum wage or disregard of it and underpay them. These migrant workers are most vulnerable because some of them are illiterate and accept the payment they may get, if any and due to their status, they cannot approach authorities or unions.

4.5.6 Synthesis

Multiple policies have been launched to improve the lives of agrarian households. While these policies possess the theoretical potential to enact positive change, their practical implementation has fallen short. This ineffectiveness can be attributed, in part, to a lack of transparency and accessibility within the policy formulation process. This disenfranchises certain agrarian communities, hindering their participation in democratic processes that directly impact their livelihoods. Civil society organisations strive to bridge this gap by mobilising communities and fostering their engagement in policy formation, while also providing educational resources. However, their efforts are limited in scope and cannot reach every individual. Furthermore, the implementation of these policies has been demonstrably inadequate, further diminishing their potential to improve lives. In conclusion, there exists a framework of policies and programs, but for them to be truly effective, a more robust approach is necessary. The government must strengthen its implementation and evaluation systems to ensure impactful outcomes. Additionally, concerted efforts are required to educate communities regarding policy formation processes, empowering them to actively participate and influence long-term decisions that affect them. A collaborative approach, involving government, civil society organisations, and communities, is essential to ensure that policies translate into tangible improvements in the lives of the people they are intended to serve.

4.6 Effects of shocks on livelihoods of agrarian households

Key informants discussed the effects of macroeconomic, geopolitical, climate-related, and health-related shocks like Covid-19 and related restrictions. This section zooms into the effects of the shocks suggestions of how they can be reduced. It also looks at the extent of support given to agrarian rural households to mitigate the effects of the shocks.

The shocks affect agricultural activities and spillover to sectors that have backward and forward linkages with the agricultural sector. As pointed out by TA affiliate official 4:

“[over the past 10 years] prices were influenced by climate disasters, by Covid-19 that resulted in job losses. There's a lot of people in our area ... who lost their jobs. People like restaurant workers for example, lost their jobs, because restaurants had to close down locally. Our area is a tourism area. So, because of Covid-19, there was a lot of stand-still with moving in and out of the country”.

Government official 8 acknowledged the vulnerability of rural, particularly poor, communities, to any kind of socioeconomic shock:

“... rural and poor communities are very susceptible to shocks, you know ... they cannot go back into production immediately thereafter, even now because the day olds are available now, they're still not able to go back. Climate change is very serious, the impacts are very bad and it's affecting uh, poor rural communities very adversely”.

While one government official stated that the government is supporting farmers with the necessary inputs to cushion them against shocks by supplying seeds and other inputs that affect agricultural activities, another state official said the support farmers are given might not align with their needs.

“As the department we are trying to come up with strategies to assist farmers ... programs that are supporting farmers. So, when farmers are struggling in terms of fuel prices, we assist them in terms of providing production inputs. That means they are not going to buy the production inputs such as seeds, fertilizers, material that they need. They're going to take that money that they were going to use to purchase production inputs and use that money for fuel. So, initiatives such as those are assisting farmers on the ground a lot. So those challenges, even though they're affecting farmers, departments on the ground are helping farmers to resolve issues that are affecting them”. (Government official 9)

“... the first time I started to realise that petrol is a problem was when farmers were started, were starting to come to us to say, but no man, instead of giving us seeds, why don't you give us diesel? Why don't you support us with diesel? Seeds, we can make a plan, but the diesel is killing us more ... you can see they are more sensitive ... and that was before many of us started complaining about the petrol price”. (TA affiliate official 6)

These few examples offered by key informants touch on some of the ways in which shocks impact on rural agrarian households. In the following sections, climate change, Covid-19 and loadshedding are further explored.

4.6.1 Climate crisis observed in the past ten years, and their effects

Key informants report that climate dynamics hamper the productivity of agrarian households, thereby affecting their livelihoods negatively. The climate change dynamics observed include floods, and wildfires due to high temperatures. The magnitude and frequency of climate-related hazards and disasters vary across regions:

“... climate change ... currently I would say it only affect people in terms of ... seasonal floods”. (Government official 5)

“... we in the Karoo we experience mostly it's either a drought or a mini flood”. (TA affiliate 4)

“... there has been a serious problem of drought at some stage and there was a disaster in the area where there were number of locusts that destroyed most of the produce in the field ... an effect of climate change”. (TA affiliate official 5)

“Mpumalanga has recently experienced flooding around February early this year, and those things were never actually experienced long, long ago, not now not only affecting us as human beings, even the plants, the vegetables, the cabbages are also suffering from all these heat waves and floods and storm”. (Government official 7)

A key informant concurred regarding the challenges brought by worsening climatic conditions, pointing out that during drought and excessive heat periods, having irrigation does not always solve the problem. NGO practitioner 4 points out that:

“... even farmers who are not on dry land and actually even having irrigation system it becomes very costly because as the weather is very hot, even the pests become a problem or a challenge. So, they would have to end up spending a lot of money for purchasing those pesticides to help them control the pests. So, it becomes like they end up using a lot of money for production”.

In some areas, as pointed out below by NGO practitioner 2, agrarian households experience both floods and extreme temperatures:

“What I see is that in the farms ... and we are disturbed by the sun and disturbed by the floods”.

A Government official 9 explained how livestock farmers are affected by the increasingly drier conditions which result in reduction of both water and forage for their animals:

“Climate change it's a very important issue and it needs more attention because it's affecting farmers ... when it comes to animal production, climate change has affected farmers because we'll find out that water sources that have been on the farms are stringing and are becoming less and less ... feed or forage that is needed for animals on the farm to feed on are reducing in terms of quantity ... that in the area that I'm in, it is a very dry area [in the] Western Cape”.

Key informants confirmed observing and/or experiencing the negative effects of climate change over the past decade. Agrarian households that engage in farming have been experiencing increasingly reduced harvest due to climate change dynamics, for example, Government official 3 explained that:

“... the way we receive our rain ... climatic conditions ... have changed the way the farming has been done ... even the ... South African ... Weather [Service] they can't specify when does the rain come, when does our winter come when does our summer come. In October you will get a very cold spells and that affect the way we do our crops, crops including your horticulture, your vegetables your grains even including raising chicken because they depend on a good conditions ... things have changed so now if you plant because you are still using the old methods ... you

are not going to get it right. Farmers are now becoming more Christians in terms of when they put a seed in the soil, they pray so hard that the rain comes. I was with one of our farmers yesterday who have planted soya they say 'I wake up at 2am when I get first rain, I wake up at 2 and I started planting because I don't know when am I going to have moisture again to put seed in the soil'. Other thing if you miss that and then your harvest because the ultimate thing is the harvest that we are going to get, the quality and the quantity of a harvest if it's not good the money that you are going to get is not good and the money if it not good it going to affect the farm worker that you are supposed to pay".

Sometimes the weather patterns become very unpredictable, making it difficult for experts to give farmers the correct advice. Government official 6 argued that:

"With climate change it's difficult because even we, the so-called experts cannot even advise the farmers anymore because you expect the rains to start at this point. They start at the other point. You are experiencing uh, rainfall at very irregular times ... like this year in particular ... you are having high rate of evaporation because of this extreme heat ... So, the result is that your crop producers are going to incur a lot of losses because of the changes in uh, the weather patterns. And unfortunately, they do not have you know, your major irrigation systems that the commercial farmers have".

The challenges brought about by unpredictable weather patterns were confirmed by NGO practitioner 1 who pointed out that:

"... in the last year, they couldn't plant because the rain was too harsh. I had also planted potatoes. They were rotten because there was too much water".

In addition, those who rely on rain for their farming incur losses because of the increasing variability in rainfall patterns, as explained by NGO practitioner 4:

"Farmers who work in dry land end up not producing anything if there isn't rain because sometimes, they have to start producing only when it's a rainy season and then you find that the rain is not raining at all or it's not coming for that as they would expect. But because they had prepared and started planting, they would plant anyways only to find that they won't make anything out of that".

Limited or no government support leaves agrarian households with no option but to let go of their farming activities, as captured in the words of TA affiliate official 2:

"In terms of the drought, ... your small-scale farmers ... yeah, especially your small-scale farmers ... can't afford financially to purchase feed for their livestock. So, they are dependent on the grazing land and because of the drought and ... there was little support from government, so they had to sell their livestock like the sheep and the goats ... because they can't afford it. They don't have additional income to actually purchase feed for their livestock. ... Also, the accessibility of water. Most of them ... make use of ... domestic or household water. So, they have to ... support their livestock with ... household water, domestic water ... that contribute to actually the municipal accounts which they can't afford ... So, it was very challenging for them,

and they actually made them decide to ... stop with their farming activities ... so people stop producing in terms of the climate change”.

The effect of shocks on agrarian households is influenced by the extent of support agrarian households can get from state and non-state actors. TA affiliate official 1 highlighted the design of eligibility criteria for benefiting from government relief programs for farmers:

“when people are affected by drought and floods you will have those state advertising making a call for farmers to make application to have access to those funds but the criteria that is used there automatically excludes small scale famers because they would say a famer needs to have an annual turnover of a particular amount and then a lot of small scale famers won't fit in that category. So, by design they are excluded and... and obviously those that will [be] going to get that support which mostly don't need because they got insurances, they can always recover are medium and lager scale commercial farmers”.

The problem is compounded by unavailability of options to grow crops that are suitable for the existing climatic conditions in some areas, as further discussed by TA affiliate official 1:

“... farmers ... notice that they are no longer able to increase or at least maintain the same meals in the past 10 years ... they attribute that to climate change. They are also struggling as well with the seeds because they can't get seeds that ... can grow under this new climate change without disturbance”.

TA affiliate official 2 also spoke about the changes over the past decade, pointing out that:

“... the climate change leads to drought, lead to flooding. It means that the seasons have changed”.

Government official 6 added that while it is not easy to distinguish climate change and adverse weather events, it is evident that there are changes being experienced:

“it's always difficult to ... distinguish between what is climate change and what is just adverse related events. So, if you look at the drought we had a couple of years back, it changed pretty well ... I mean there has been drought in the past, throughout history, the same ... with the flooding, ... but I think what we are seeing is ... increase in adverse weather events, we see a lot more flooding ... we've seen one of the most severe droughts ... in the space of the last five to six years, so I think the reality of it is we are seeing that the overall climate is changing”.

Because of the reality of the damaging effects of climate change, TA affiliate official 2 argued that:

“You can't just now plant what you used to, you now have to adapt to ... plant, what kind of crops, you have to adapt to a lot of pesticides ... you don't know how to control the pests because of the climate change. So, it means it has impact on also on your production in terms of your crops ... you don't have enough feed for your livestock because there is no rain”.

In addition, other people in households that depend on agriculture are affected indirectly, as argued by Government official 2:

“... if there is a flood and the whole harvest is washed away. It's got the ripple effect on the people that is employed to, for example, you know, do not just primary but also secondary agricultural activities. If we're dealing with ... drought and there's not sufficient harvest ... in a specific year, then it ... often results in ... people having to be laid off or ... appoints people ... as seasonal workers”.

The following quote from TA affiliate official 7 highlighted the disproportionate effect on rural communities:

“... climate change shocks ... has really impacted the agricultural sector negatively in the rural areas, especially here in Bergville because you find people, they have nothing to fall back on and agriculture is the only thing that they have. They venture into your broiler chickens when they've got their broiler, you find that, there's a heat wave, temperatures are too high, they lose their stock, losing money and losing hope and any desire to continue uhm you find there's hail and flash floods which are wiping away your crops leaving your farmers at a disadvantage uhm as now they have to increase their prices in order to cover for the loss that they have”.

The effect of climate change is also said to be compounded by cultural and societal beliefs and expectations, as argued by NGO practitioner 5:

“How climate change affects, agrarian households, it affects them in different ways. It changes the planting season. If your planting time is today the 13th of December and there was a hailstorm last night, in the rural community and beliefs, you are not allowed to touch anything that has to do with the soil because there was a hailstorm”.

4.6.2 Climate effects mitigation

This subsection looks at ways key respondents suggested climate change shocks could be mitigated. A starting point was offered by one key respondent who emphasised that to mitigate the effects of climate change, there is need to look at how agriculture contributes to climate change as well as how climate change impacts agriculture. TA affiliate official 9 argued that:

“... to look and analyse how does agriculture contributes to climate change and how can agriculture be done differently to mitigate or to minimise its effect or its contribution towards climate change. So, its practical examples, but also more ideological and discussions on what is necessary to bring about more systemic change”.

Government official 8 pointed out that mitigating against the effects of climate change is limited because some of the events or their magnitude cannot be estimated:

“... it's one thing to say we know about climate change, but it is another to say we are going to mitigate climate change because what are you going to mitigate? In which direction is the climate going to change next year? Is there going to be floods? Is there going to be severe droughts? ... what is going to happen? What we are able to do, especially for those who plant and for those who have got like livestock, we are able to provide them with drought resistance seeds. We are able to advise them on having cattle that are more adapted to dry condition you know. So, we deal with that part ... But the other part of the floods ... we deal with it as part of disaster management. But what the communities themselves are doing, it's very difficult to plan against this thing because it's imminent. You can't predict what is going to happen”.

Questions around who should be involved in thinking through mitigation were also raised, TA affiliate official 9 suggested it should be women as the most affected by the impact of climate change:

“... spaces [should be created] where women can understand what climate change is and also hear from them how climate change affects them and how the changing weather patterns affects their livelihoods”.

Other actors identified include civil society and the private sector, though not all interventions are successful:

“we have reached out to a few local businesses locally, and they could manage to sink a borehole in the informal settlement and out of the borehole there was a little bit more water available, and also the water could be used for the garden in the informal settlement. But the borehole didn't work too long, or the materials apparently that was used was second hand and so on and all. But also, why I'm mentioning that is because businesses are not really serious when it comes to investing in the local communities”. (TA affiliate official 4)

Aside from actors, key informants mentioned specific approaches and technical fixes relating to soil and how soil is worked were raised, for example, NGO practitioner 3 argued that:

“So, if you look after your soil then you will have like good crops. So, part of [it is] looking after your soil, we encourage things like minimal tillage ... where [it is possible]”.

This approach is even encouraged by government, though it is open to critique, as indicated by Government official 3:

“... currently especially for grain farmers they have adopted the method that is called no tillage method where you don't need to disturb the content of soil, you don't need to disturb the moisture content of soil ... you use no tillage method. The problem with that method that they adopt it is expensive only commercial farmers who have a lot of money they can do that but other famers they can't especially the emerging famers subsistence farmers they can't use that method because it is expensive”.

NGO practitioner 3 highlighted that even though those who contribute more to climate change suffer the least, it is important for agrarian households to implement climate mitigation measures:

“... climate is a big issue and unfortunately it affects those who offend less than those who offend more. But that does not stop us from doing what the little that we can do. And also, in terms of mitigating this climate change, we always encourage farmers to intercrop rather than monocrop ... practice crop rotation ... saving the little that we have when it comes to the environment”.

NGO practitioner 3 spoke to the specific nature of farming approaches, and how mulching could assist with preventing soil loss as a result of climate change related weather events:

“... when it comes to climate change ... statistically it has been confirmed that chemical agriculture is the worst offender. But unfortunately, small-scale farmers are affected by the change of weather patterns. Like back in uh, July we had very, very strong winds here and obviously some farmers, they've lost their crop and then you go to places like KZN and some of them they've lost their crop due to flooding ... So, small scale farmers, we do encourage them to apply like the basics ... like mulching ...”.

NGO practitioner 2 pointed out that climate mitigation is hindered by lack of knowledge and looking down selective embracing of knowledge depending on who brings it.

“... our people don't actually have the knowledge that when this happens, this is what they must do. Even if we had got that knowledge a little bit, you will tell a person, and then they don't believe what you are saying. Actually, you my child, I think you know that a person will understand something if it comes from someone who is from Durban or Maritzburg, you see? When you come from here and we live with you and you start speaking, they say you have started”.

Other key informants suggested a range of climate mitigation strategies related to use and water retention:

“... water is a scarce resource, so, introducing activities of farming such as Aquaponics, whereby you produce fish, and then fish and vegetable in the same system. You use the water that you are irrigating in for vegetable, it circulates back to the fish and then you take it from the fish. The manure that is there in that water that is produced by the fish is taken back to irrigate uh the plants. So, systems like that help us to overcome the issue of climate change. When there are challenges uh with climate change, challenges of water, we also do a support of drought relief for example, whereby the department is building or establishing bore holes for farmers for them to have water”. (Government official 9)

“... harvesting rainwater so that they can use that water during dry times so that their crops can remain having uh irrigation and therefore being uh of a good quality. That's basically what we have been actually able to do, but also there has been an education around climate change so that people can understand what is really happening around them and what the effects are”. (TA affiliate official 5)

Some solutions suggested to mitigate the effects of climate change are the need for farming communities to ensure their farming activities, put fire barriers against fire and walls against floods as well as using greenhouses. Government official 4 pointed out that:

“when it comes to climate change I think our people need to make sure that they learn how to actually ensure their crops, they making sure that they got insurances and then ... for the natural disaster, if they want to make sure that they produce after there was a natural disaster they need to make sure that they got maybe insurances ... they need to just make sure that they do precautional measures, for instance ... the fire belt to avoid ... fire and ... walls around their farms to avoid the floods ... during heavy rains ... they can plant under the shield net ... they make sure that if it is too hot those crops they don't get ... too much heat”.

TA affiliate official 5 added that they assist farmers with various strategies to mitigate the damaging effects of climate change.

“So, they've got a lot of adaptation skills that they've acquired throughout the years. For example, one of those would be people struggle with strong winds, droughts, and sometimes heavy rains. So, the way that they plough their lands have changed. So, you don't plough for example in the way that you know the water runs ... it's going to be just deep gullies ... they have got five-meter windbreaks, organic matter ... in between their farms ... [which] helps with preventing ... wind ... [to] blow away the topsoil. Then there's erosion control that they've been doing”.

Civil society actors who support farmers that do farming as a source of livelihood provide them with training to ensure that they continue to get income. This is highlighted in the explanation by TA affiliate official 6 below.

“... drought is the one thing that we keep on facing in the Northern Cape ... to keep this plant moist ... in drought years so that it actually can still grow, and it can still provide an income”.

As farmers adapt to new farming methods, some are constrained by costs which forces them to stop farming in some instances. Some suggested solutions to the problems provided by Government official 5 are:

“... we can assist with water harvesting; we can assist with utilising grey water for vegetable production ... we can also try and adapt by planting the right vegetables ... that is a little bit adapted to ... the new situation, but this is not so much in household circumstances but ... in longer term clubs or? like grains and ... cultivars with ... a shorter growing time”.

Climate change results in pests that agrarian households are not aware of, increasing their costs. This is highlighted in the explanations by TA affiliate official 2 below.

“Because the pests, the insects that is that you don't understand. Now there's a lot of new insects you need to control. It means you have to buy more pesticides, fertilizers ... it's a new way of adaptation for people that they are not used to and that leads also to people not wanting to produce food anymore because they need to adapt, and they can't because it's a lot of input costs that is going in now. You have to invest in your in your soil, so people stop farming or maybe they change ...the small-scale farmers where they have farmed ... a certain kind of livestock sheep, they need to adapt now to for example, in our areas, people used to farm dorper. It's a kind of livestock sheep. Now they have to farm with meat master's because they need to adapt now to this new type of livestock.

... people need more grazing. Where they used to farm in corals, they can't do it anymore because they need to have more grazing land available because of the drought and the losses or the field policies is not there anymore that actually support their livestock. So, they have to give now medicine to the livestock which they previously didn't have to ... so people need to adapt and that's why small-scale farmers just don't want to farm anymore”.

Mitigation against the effects of climate change requires a lot of effort, with agroecology as one of the sustainable solutions. The importance of organic farming and efficient use of water is highlighted in the statement by Government official 6 below.

“... we need to adapt ... but [what] farmers are mostly doing is they're looking a lot at ... crops that can protect your surface so that ... they increase the organic content of the soil because that increases your water retention. They are looking at more resilient crops. They are looking at the adapted irrigation systems, more efficient irrigation”.

4.6.3 Covid-19 and its effects

Covid-19 with its related restrictions was a major setback for agrarian households and their livelihoods, as discussed by respondents compounded with minimal support from government. Key informants lamented the financial burden that the pandemic placed on them. Due to lockdowns labour was disrupted and farmers could not access seasonal labour and that impacted their livelihoods. Covid-19 and the ensuing lockdowns rendered agrarian households vulnerable because they are already not able to withstand social livelihood shocks, and this impacted their livelihoods negatively. It further exposed deep seated inequalities as those with bigger business were able to survive the challenges while small scale farmers bore the brunt of the pandemic. Some had to shut down as they could not continue to operate due to challenges with accessing finances and resources. TA affiliate official 3 mentioned that,

“So, the Covid-19 again exposed, you know ... some of these deep-seated inequalities ...in that ... the loss of ... jobs resulting ... [from] the closure of some of the economic sectors or businesses”.

Government official 3 concurred on the effects of Covid-19, pointing out that even though the agricultural sector was operating during the Covid-19-induced lockdowns, its effects were felt beyond agricultural activities,

“... lot of people has lost jobs the reason of losing jobs [is that] the restaurants were not working, your hotel was not working, ... the only food that we produced by then it was for [home] consumption and then the consumption rate [low] as much as we was sitting home with our families and ... lot of people ... lost jobs during Covid”.

Low economic activity during the Covid-19 pandemic due to closure of restaurants, hotels and schools as well as contraction in exports due to disruptions in global food chains created depressed aggregate demand for agriculture products.

“It affected the agrarian space in a bad way ... people working on the farm are woman and because farmers as much as they were producing during covid the food or whatever they were producing the market was flooded ... farm workers in general ... couldn't support their families ... some they come out losing their jobs some of the farmers didn't recover until today because the impact was so severe and it just happened abruptly in the middle of no one was prepare for that”. (Government official 3)

“... we got that first big lockdown ... It really affected people and it also affected especially the markets ... [those who] were exporting to European countries”. (TA affiliate official 6)

Despite the significant negative impact of Covid-19 on farming activities and agrarian households, TA affiliate official 2 argued that there was lack of support to cushion people from the effects of the pandemic.

“... in terms of Covid-19 there was like no support from anyone in Covid-19 and so it's a lot of people, actually, especially farmers who have group in terms of crops, household gardens and so forth. Everything stopped when it was Covid-19. People stopped producing food because they can't produce anymore. There's no support. Government say they need to spend the funding in terms of PPE, tests, sanitizer and all that kind ... so, the shift in the support chains in the Covid-19 from your small-scale [farmers] or they cut the usual funding ...so, people just ...quit in terms of their farming”.

Government official 8 concurred that there was limited support given to farmers during the Covid-19 pandemic, pointing out:

“... they couldn't get support from government because officials were curtailed from going to farms. It was very difficult for officials to go out to farms to provide support. So, the farmers were basically on their own. They were isolated there, in those rural areas in those farms ... that took place for a period of about 30 months whilst we had Covid”.

The effects of Covid-19 among farming communities persisted well beyond the periods of lockdown. Government official 6 pointed out the disruption of farmers' export markets.

“There are wine businesses that are still struggling to recuperate from that because what actually happened was international markets didn't care whether there was any policies or anything. So, if you couldn't supply, they just found wine from somewhere else in the world, so there's a lot of markets that were lost because of that and yeah, so, so the wine industry as a whole and the employees in that industry, I think there was a lot of struggle, they are still now busy recuperating from that last year or two years”.

Support during the Covid-19 came from partnerships between various sectors of society. TA affiliate official 4 stated that:

“... to reach out to businesses to address some of the needs. A soup kitchen was started and also, local businesses was approached to give donations and so on. And there was commitment from one lawyer, well-established lawyer in Graaf-Reinet who provided food through the local [Spar] where the soup kitchen could at least cook a meal for the people once a week, and out of the garden was planted and out of the big garden that ... they were able to bring the idea more down to a household level”.

Support given to agrarian households is believed to have been significant, as Government official 7 pointed out:

“Covid-19, of course it affected some of our farmers, but we are glad to our government because we had some presidential stimuli initiatives where we got some funding ourselves. Even today we are supporting our farmers through that PESI program where we are supporting them because it comes from Covid funding. So, yes, there were some bit of disturbance, but with Mpumalanga it has been declared statistically that when it comes to agriculture it never deteriorated during Covid. It actually ... excelled even more than anything because we were still, remember Mpumalanga, it's one of the best provinces when it comes to agriculture in terms of citrus, in terms of macadamia, in terms of bananas. So, we were doing well even more because we are internationally, exporting”.

The difference between viewpoints from the above two key informants shows that adequacy of support from government is seen as adequate by government officials but as inadequate by non-state actors. NGO practitioner 3 pointed out how important local availability of seed is, in situations like the Covid-19 pandemic when value chains and international markets are disrupted:

“... like Covid, it is essential that farmers save their seeds because if we can't access where the seeds are bought, then it means we can continue to grow our food. So, we think it's important that at a household level you do have like your own seed bank and then obviously at a community level where we can have a bigger seed bank and encourage farmers to exchange seeds amongst themselves because obviously, I might have this and someone else doesn't”.

NGO practitioner 4 highlighted that support given by the state is not always appropriate or enough for the targeted beneficiaries:

“there are programs, or there is one program that was developed for farmers, but it simply targeted mostly young farmers ... but the challenge with ... that program that targeting young farmers that they are not much farmers who are young ... that means uhm somehow some way there are people who got access to funds but wouldn't actually use them uhm, in the agricultural setting or actually during the production itself ... there isn't much that has been done in terms of that besides that particular program that was developed. But I think if a similar program would be developed and it wouldn't have an age restriction, it would have an impact for farmers who are producing to sell”.

Government official 6 agreed with the above view, pointing out that:

“... it was nowhere near sufficient to assist with the losses that was ... due to this pandemic, the Covid Relief Fund farmers were small”.

The impact of Covid-19 caused a great income loss for those whose livelihoods depend on agriculture. As mentioned by one key informant above, even though agricultural production still occurred, the markets were flooded. This meant that food was produced but was not necessarily sold. Besides this, the food became expensive as well, so people were unable to purchase most goods. On top of it all, people lost their jobs which ultimately led to them being unable to support their family. It becomes evident that besides the physical losses people in the agrarian setting face(d), there is an emotional and mental loss as well. Government official 3 stated that:

“...people have felt that pain because if a father and a mother couldn't provide his children then the child is the one that suffer”.

The general sentiment from the responses above is that even though there was support in the form of vouchers and various other relief funds, it was still inadequate to help them recover to pre-Covid-19 era conditions.

4.6.4 Effects of loadshedding

Some key informants argued that loadshedding has the most severe impacts on farming activities, when compared to other shocks including Covid-19, climate change or shocks due to external factors. The problems brought about by loadshedding were identified as one of the serious challenges faced by agrarian households.

“... the effect of loadshedding, it costs, especially the poultry industry, billions of rand because if you have [a] structure that holds hundred and fifty thousand birds and ... you switch off the electricity they suffocate because those houses are made in such a way that they produce cold air to regulate the temperature if the temperature become too hot they suffocate and get heat from, if the temperature become too cold and then they die because of the coldness those factors are the factors that made lot of people to lose jobs, if you lose hundred and fifty thousand [in a] day”. (Government official 3)

“load shedding ... even today, it's a problem and that is why we are considering, uh, you know, investing in generators, and the inverters, and all those other forms of alternative energy because rural and poor communities across whether rural and urban, uh, are very susceptible to all these shocks, and for them to come back to normality, it becomes, uh you know, a very steep mountain to climb” (Government official 8)

4.6.5 Effects of global shocks

Agrarian households and their livelihood sources can be disrupted by external shocks that include fuel price shocks and the ongoing Russia-Ukraine war:

“... the high product of fertilizes the Ukraine and Russian war it has cost South Africa in the past years since the war started a lot of billions of rand reason being those are the fertilizer producing nations. ... these challenges which push people out of employment in agricultural sector”. (Government official 3)

“... when there is high price of fuel, that means there will be uh a high price of production inputs, therefore it'll reduce now in terms of uh the profits of the farm”. (Government official 9)

TA affiliate official 2 concurred with the above viewpoints, mentioning that small-scale farmers do not receive support from government to cushion them against external shocks.

“they actually struggle ... in terms of the prices and that also has an effect on in terms of the prices of the food ... because of the petrol prices going up it means that ... it's huge effect on ... the small-scale farmers, they are actually struggling now more because of ... the prices ... [of] the petrol, the prices in the medicine ... the prices [of] the feed that they have to buy for the livestock, the prices of the fertilizers that they have to buy ... for the soil preparation; yeah, ...it's a cycle. It's like everything is going up and people like the small-scale farmers can't survive. And because there's no support ... everyone is on their own”.

4.6.6 Government support to mitigate effects of shocks: An overview

Government provides various solutions to cushion citizens in general, and farming communities by subsidising farmers, to lessen the effects shocks. In the following statement, Government official 9 provided an overview of the support given by the state to mitigate various shocks,

“...in terms of Covid-19, when there are fuel prices are going up, when there is a drought for example, we do provide a support in the form of a drought relief for farmers that are affected in that area. When there are veld fires a farm just uh gets a fire that will burn everything on the farm and then animals will not have feed. We do have programs that support that. We refer to them as disaster support. So, programs like that are there for farmers, but those are emergency support. And also, when there are pandemics such as Covid during the period of Covid-19, there was a support and emergency support for farmers that are around in terms of providing them with their needs or the necessary things that they need. For example, farmers that need PPEs for them to access uh their farms and also their employee's uh production inputs for those farmers who need production inputs”.

While the above government official painted a picture of readily available government support for agrarian rural households, another official argued that the support does not always come on time because of procurement regulations. The statement by Government official 7 below captures the challenges faced.

“... you see agriculture is not the same with books. When you are doing agriculture, actually you cannot implement agriculture in terms of procurement PFMA and all the likes. What we are seeing, uh, it becomes actually a problematic ... where you'll find that the procurement sometimes delays the farmers ... flood, storm, rain and et cetera ... because they're not getting all this paperwork where it is delaying ... I wish, government was actually, actually, actually being so proactive to realise that when it comes to agriculture, we'll need to act like that”.

Government official 3 mentioned the unavailability of government funding as a constraint to reducing the effects of shocks,

“... one of the adoptive methods was to say let try to subsidise famers who were affected but now country doesn't have lot of money the help that we give famers to recover”.

Government official 1 argued that it is critical to assist agrarian households to have food security that can be maintained, to cushion them from various shocks.

“... a key for households is to focus on ... maybe sustainability ... trying to assist ... with food gardens, whether it's in their backyards ... doing it ... at the low cost, for example rain water harvesting rather than paying for municipal water ... also on farms (and) allocated pieces of land ... whether it is the food, gardens or ... livestock that they are keeping there”.

However, TA affiliate official 3 argued that commercial farmers are always given support while agrarian households are marginalised.

“You know, when the disaster is like that, you know how farmers, commercial farmers are looked after; you know, by government. But these guys have always been excluded”.

4.6.7 Lessons learnt from shocks experienced during the past 10 years

There are important lessons from the experiences of agrarian households, that could be pursued by both state and non-state actors to scale up the support they provide to them. Key informants pointed out the need for households to be food secure. TA affiliate official 4 pointed out that.

“So that is some of the positives that came out of the Covid-19 and the drought for people to acknowledge and understand there is a need to provide your own food”.

In addition, TA affiliate official 7 and official 8, respectively argued that:

“I would say Covid has boosted the agricultural sector because people lost jobs but in people losing jobs they then moved into the agricultural sector and started farming. So, I would say that was a boost even though uhm it came from a negative point. But for the agricultural sector, eventually uhm we saw a gradual increase in terms of the number of people taking part”.

“Farmers have seen a great opportunity. So, they were grabbing opportunities left, right, and centre. So, what happened was with the farmers that I was working with in the Midlands, with

Covid, we saw that we were able to assist farmers in getting more markets and changing their marketing strategies. So, that is an aspect in how their lives have changed”.

NGO practitioner 5 argued that the challenges faced by agrarian households could be an opportunity to increase the drive towards agroecological agriculture practices.

“[With] the fuel prices and fertilizer prices going up, what we have noted is that farmers revert to the old ways of farming when they are hit by high fertilizer prices and they now practice, I ... intercropping ... that has assisted them very much ... our grain farmers. It is quite difficult for our vegetable farmers because the sizes of the produce would not be as big as compared to when using fertilizers, and that is what I've noted ... our farmers always try to find a solution to the problem which they're facing ... they would also do your organic ways of combating a disease ... pest ... it also goes back to how resilient our farmers are”.

It seems support to households during shocks from Covid-19 or to climate change effects is more effective when there is collaboration between the civil society actors and the state. The following quotation by TA affiliate official 4 provides an example of outcomes of such cooperation.

“There was a lot of assistance through the municipality in communicating with Gift of the Givers to assist communities locally. I know each of the schools in our areas got boreholes with a lot of water tanks. I think at a school site there was about three to four big water tanks for communities to be able to go and get some water from. The community leaders where I worked started a relationship with SANParks ... parks because the informal settlement is very close to the park and they could provide the community with firewood, since it's a community where they don't have electricity. So, the wood that they got would at least help them to cook a meal ... since people don't always have money to buy paraffin ... to cook. There was a lot of ... Covid support to farmers and producers, also led by the Department of Agriculture and Gift of the Givers during that time. ... And from us as an organisation, we used the opportunity to promote the planting on a household level. We got some funding to give food hampers to the different communities where we work, but those food hampers were just there for a limited period”.

Below, TA affiliate official 6 pointed out that people involved in farming now have good understanding of the effects of climate change and how to mitigate them, compared to ten years ago.

“I think if you would've asked someone 10 years ago what climate change is and what adaptation is, people would not have been able to tell you in the way that they would tell you now”.

TA affiliate official 7 also explained that:

“... most of these changes that we are seeing with the climate change and the diseases that we are seeing ... they have been caused by what we are using. So, there is a huge transformation that is required in terms of our government, and a huge promotion around agroecology ... strengthening of local food systems so that people are not entirely dependent on the big corporations, uhm, who are already profiting from these communities, uhm, and looking at really what is good for the soil so that it can continuously produce, because some of these chemicals they do end up making the land not productive. So those are some of the challenges that communities are faced with because they used to grow something on this piece of land, but it is

no longer working and that's because of the chemicals that they've been using. It is destroying, uh, the land”.

To ensure food and nutrition security, TA affiliate official 8 argued that:

“... [there is] really need to ... assist rural communities to make use of what they have and not be highly dependent ... on these corporations. Going back to using indigenous knowledge, using what worked before, strengthening that. I think that would ensure that the food that people are having is nutritious ... and teaching rural households really to go back or advising them to go back to ... indigenous knowledge ... applying it now, strengthening the local food systems so that people are dependent on themselves and not on government or whoever else; that they are resilient. ... because if we are still going to consume or grow the food using the chemicals and whatever else, it does not address ... the situation where we find ourselves, where people are consuming food that is not good for them, that is causing diseases, that is affecting the climate ... so we really need to go back and empower rural households to grow food in an agroecological way that is safer and not harmful to the environment. That is nutritious, that is, you know, ensures that people have food closer to them, they use the available resources”.

4.6.8 Synthesis

The key informants acknowledge that the increasing occurrence of adverse climatic conditions like heavy rains, floods and drought disrupt normal farming. Both their frequency and intensity have been increasing over the past decade. They disrupt the lives of agrarian households, destroy livelihoods, reduce incomes and threatened food security. Key informants highlighted the importance of implementing climate adaptation strategies to protect the livelihoods of agrarian households, especially those involved in farming. They also pointed out the disruptive effects of loadshedding on agriculture activities, with more emphasis on this from government officials. Producing own food was suggested as one solution to help cushion agrarian households against the negative effects of various shocks to their activities.

4.7 Conclusion

There have been both positive changes and negative changes in the lives of agrarian households, as indicated by the interviewed key informants. A notable positive change is the realisation by rural communities of need to for them to increase agency and take initiatives to improve their lives. Another positive change noted by key informants is the growing awareness by rural communities of their rights, as a result of the awareness campaigns and advocacy work of the civil society sector. The key informants also noted the lack of significant improvements in the lives of agrarian households because of the persistent lack of job opportunities and lack of livelihoods in their places. This challenge is further compounded by the apparent lack of motivation by the younger generation to participate in the agricultural sector as they prefer to work in non-agricultural sectors.

Agrarian households are affected by shocks that include adverse climate conditions, Covid-19 related restrictions, macroeconomic shocks and global events like the Russia-Ukraine war. These shocks disrupt their livelihoods, cause job losses, reduce incomes, trigger price increases and worsen food and nutrition security. The key informants highlighted that these shocks, exposed deep-seated inequalities in the country. For example, the some of the relief provided by government during the Covid-19 induced restrictions excluded small-scale farmers through technicalities like minimum turnover. Furthermore, key informants, both state and non-state officials, highlighted the inadequacy of the support provided to agrarian households by government, during crises time as well as under normal circumstances. They concurred that there is need for increased and improved support to agrarian households and rural communities, without that, their lives will not improve and might deteriorate than they currently are. When planning support for agrarian households aimed at improving their living standards, it was emphasised that relevant support will require their involvement including in the formulation of policies that affect or are intended to benefit them, to ensure that government provides them with what is suitable for their needs.

5. FINDINGS: ANALYSIS BASED ON SURVEYED AGRARIAN HOUSEHOLDS

5.1 Introduction

This section presents the findings of the agrarian household survey. To review some similarities and differences over the past decade, the relevant and relatable findings from the 2012 report will be presented. Numerous definitions of agrarian households exist as the review of global experiences show. In this study, the broad working definition operationalized refers to someone who earns a living from farming or primary agricultural activities. These include subsistence farmers, smallholder farmers, farm workers and farm dwellers. The survey sought to document the livelihoods status of agrarian households in 2023 and identify whether any changes have occurred in how they live and work in the last decade.

The survey classified agrarian households into three distinct categories based on the self-reported primary occupation of the household head. In order to gain a sense of household living standards, the study documented sources of income, food expenditures and non-food expenditures. Recording the production activities of households assisted in identifying the sale of agricultural products and access to farming resources. The extent of selling crops and livestock assisted in determining whether respondents were smallholder or subsistence farmers. It investigated the working conditions and living arrangements of those who worked on farms for wages. Labour hiring practices, minimum wage policy implementation and some non-wage benefits that affect the employment conditions of farm workers received close attention.

This chapter presents and explains the results of the survey. It begins with a description of agrarian household profiles in terms of its gender, age and size composition, educational attainment, and whether they belonged to any organisations and associations. Second, it sheds light on the production activities of smallholder and subsistence farmers. Third, it documents the experiences of farm workers and their employment conditions as well as farm dwellers and their living arrangements. A final section summarises the effects of climate change on agricultural production and incomes.

5.2 Agrarian households and demographics

5.2.1 *Who participated in the survey*

Table 5.1 shows the realised sample of the Agrarian Households (AHs) who were surveyed in the 12 district municipalities. The AHs were classified into livelihood activities based on the self-reported primary occupation (way of earning of living) of the household head. These were farmers (850 survey participants), farm workers (337) and farm dwellers (110). The total share of AHs was divided into three distinct

livelihood activities with farmers being the dominant activity. The highest share of farmers was located in Sarah Baartman (98%), Sedibeng (95%) and Amathole (92%). The lowest share of farmers was recorded in the Cape Winelands district (4%). Farm workers were largely located in Cape Winelands (42%) and Fezile Dabi (65%) and the fewest in Sarah Baartman (3%). Out of the 12 districts surveyed, farm dwellers were only located in six districts. The highest share of farm dwellers was located in Cape Winelands (54%), Overberg (19%) and Amajuba (9%). The lowest share is recorded in Fezile Dabi (5%) and Uthukela (4%).

As noted previously, there are several differences between the current study and the 2012 report. For one, the survey took place in four different provinces (mainly the Western Cape, Eastern Cape, KwaZulu Natal and Limpopo) and nine different district municipalities (Amajuba, Amathole, Uthukela, Vhembe, Eden, West Coast, Overberg, OR Tambo and Cape Winelands). In addition, the 2012 report captured six different tenure types namely communal land, farm dwellers on commercial farms, land reform (redistribution and restitution), commonage, informal settlements/towns and church land. The survey was skewed towards the Western Cape with more than 50% of the survey participants located there. Communal and farm dweller/worker were the highest respondents forming 70% of the sample.

Table 5.1: Realised sample of agrarian households interviewed – according to district municipality, 2023

District Municipality	Valid Obs. [N=1297]	Agrarian households (Share = %)		
		Farmers (n= 850)	Farm workers (n=337)	Farm dwellers ^a (n=110)
Amajuba	67	61.19	29.85	8.96
Amathole	126	92.06	7.94	0.00
Bojanala	112	86.61	13.39	0.00
Cape Winelands	114	4.39	42.11	53.51
Ehlanzeni	117	91.45	8.55	0.00
Fezile Dabi	110	30.00	65.45	4.55
Namakwa	118	53.39	38.98	7.63
Overberg	128	61.72	19.53	18.75
Sarah Baartman	120	97.50	2.50	0.00
Sedibeng	56	94.64	5.36	0.00
Uthukela	116	60.34	35.34	4.31
Vhembe	113	61.06	38.94	0.00

Note: N = total number of observations excluding missing observations. n= is the sub-total. The share% represents the share of individual farming activity from valid observations.

^a Farm Dwellers are individuals who reside on farms that are owned by someone else.

Reviewing the Agrarian Rural Household survey results is a good starting point for assessing the changes in household demographics within rural communities. Table 5.2 summarises the overall profile and demographics of AHs as reported by the survey participants. The information gathered for the AH size,

composition, age and employment status (main demographics and employment features) is important to make a comparison of the female and male-headed AHs. The female-headed households accounted for more than 50% of the surveyed sample. Female-headed AHs are larger and older on average than male-headed AHs. The average household size and age in years of female-headed households is 4 – 5 members and more than 50 years old. Male-headed agrarian households have about 3 – 4 members and just below 50 years old. For both male and female-headed households there are more than two adults and children on average. Additionally, the average number of individuals who are either employed or unemployed in both female and male-headed AHs is greater than one.

The 2010/2011 Agrarian Rural Household Survey reported that the average household size was approximately four members per household. In addition, more than 63% of surveyed households had less than five people in the household while 35% of the households had between five and ten members. Communal areas had relatively small household sizes with 71% having roughly four or less members. More than 50% of the household members of the total survey were females. The results point to more males among the youth and more females in the older age categories. Children under the age of 18 were part of many of these households with boys accounting for a higher share than girls in this category. Around 60% of all working people were between the age category of 19 and 59 years. More women (61%) are employed within the rural environment than men (58%). There is a small sample of the population that are within pensioner age (60 years or older), this accounts for 5%.

Overall, there have been varying developments within agrarian households. The household size has decreased significantly from a decade ago. This decreasing trend in agrarian household members could reflect the lack of economic opportunities within the rural setting which forces individuals to move to areas with better economic opportunities. The growing trend of moving towards urbanisation has been noted across the agrarian households where people move to another municipality with more opportunities or a bigger town. The pull and push factors are prevalent within the rural areas and are the key drivers of urbanisation. Pull factors refer to the things that make the move to urban areas more attractive. These include access to better housing, job prospects and better education. Push factors are those that drive people out of the rural areas. These vary from high eviction rates within farms, decline of commercial agriculture and the mechanisation of commercial agriculture decreasing the need for more farm labourers.

Table 5.2: Total size, composition and employment status of agrarian households, 2023

Size & composition	Female-Headed [N=660]			Male-Headed [N=637]		
	Valid Obs.	Average	Median	Valid Obs.	Average	Median

Household size	660	4.49	4.00	637	3.92	3.00
Age	660	51.85	53.00	637	49.96	49.00
Adults	660	2.55	2.00	637	2.39	2.00
Children	512	2.50	2.00	384	2.54	2.00
Employed women	315	1.35	1.00	205	1.28	1.00
Unemployed women	402	1.37	1.00	337	1.31	1.00
Employed males	261	1.31	1.00	383	1.31	1.00
Unemployed men	275	1.45	1.00	226	1.28	1.00

Note: Total includes farmers, farm workers and farm dwellers.

Figure 5.1 presents the age distribution within female-headed households according to their livelihood activity. According to this figure, there are very few female-headed households, who form part of the youth category (below 35 years) making up less than 10% of the total female farmer households in the sample. Most of the female farmers are within the age categories of mid-adults (28%) and retired pensioners (35%). Farm workers are relatively young compared to all other livelihood activities. There is a large share of farm workers who are within the youth age category (34%) followed by the mid-adult category (47%). Less than 4% of the pensioners were farm workers. Farm workers tend to work long hours, and it is concerning when workers are beyond the retirement age. Farm dwellers are mostly mid-adults (38%) and pensioners (38%). There is a small share of farm dwellers who form part of the adults and youth with 14% and 9% respectively.

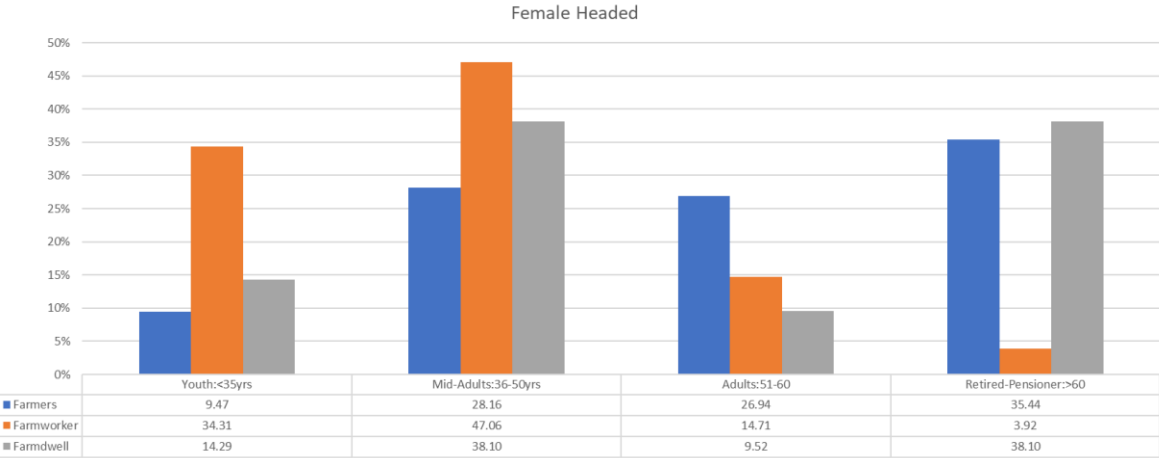


Figure 5.1: Self-reported age distribution of female-headed agrarian households by agrarian activity, 2023

Note: The age distribution of total female-headed households

Like Figure 5.1, Figure 5.2 looks at the age distribution of male-headed households. Around 10% of the farmers were within this youth age category. Adults and pensioners age category were the largest share of farmers with 30% and 37% respectively. This indicated that farmers are generally older than all other age categories. Farm workers are young, making up more than 30% of the youth age category (below 35 years). The majority of workers were within the mid-adults age category (49%). There was a smaller share of adults

and pensioners who were also farm workers. Adults made up 15% and Pensioners made up 4% of the farm workers. Almost a quarter of farm dwellers are within the youth category, and the mid-adults. The largest share of farm dwellers is within the pensioners (28%) age category.

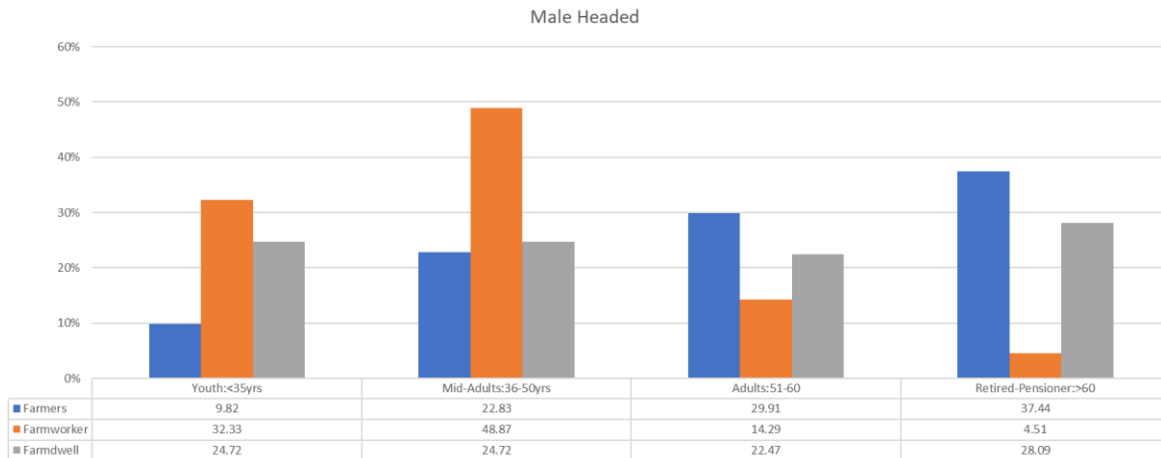


Figure 5.2: Self-reported age distribution of male-headed agrarian households by agrarian activity, 2023
Note: Age distribution of total male-headed households

5.2.2 Educational attainment

Figure 5.3 and Figure 5.4 show an overview of the level of education of both male and female heads of households. 660 observations were made for female-headed households and 637 observations were made for male-headed households. The level of education is categorised by: No Schooling; Primary School (highest); up to grade 11 (highest); Matric (grade 12) completed; and Post High School Education Completed. The table shows that across all AH there are those who have no schooling with farm dwellers having the largest share in both female (11%) and male (24%) households. In female households, the livelihood activity that had the highest completion of primary or secondary education (secondary excludes matric) were farm dwellers (84%) followed by farm workers (82%) and farmers (65%). Farmers had the highest level of educational attainment with 6% having completed post high school education in female households.

Male household heads that had the highest completion of primary or secondary education were farm workers (83%) followed by farm dwellers (76%) and farmers (59%). Farmers had higher levels of education with 22% having completed matric and 9% having completed post matric qualifications. From Matric, more males completed their matric and post matric qualification compared to females. This substantial disparity in matriculation rates between males and females suggests that either women dropped out of school after finishing grade 11 or they attended but failed the final examinations. Furthermore, farm dwellers did not pursue post high school education.

In 2012, the study found that there were more males who were not in education than females. Additionally, more than 80% (82%) of agrarian households had primary or secondary education as their highest form of education. Less than 2% had higher than a matric qualification. There were more women who had completed their secondary (39%) and matric (12%) education than males. More males had completed a qualification beyond matric than females. There are many benefits that have been associated with education. Education increases the human potential of labour, often leading to greater productivity levels. That is why households are willing to invest in the future of their children. Education can play a vital role in addressing food insecurity within agrarian households. It also gives people the opportunity to enhance their production practices, so they are able to work for the betterment of their agrarian household. As more people get educated in agrarian households there will be higher chances for rural-urban migration to seek better education or work opportunities elsewhere.

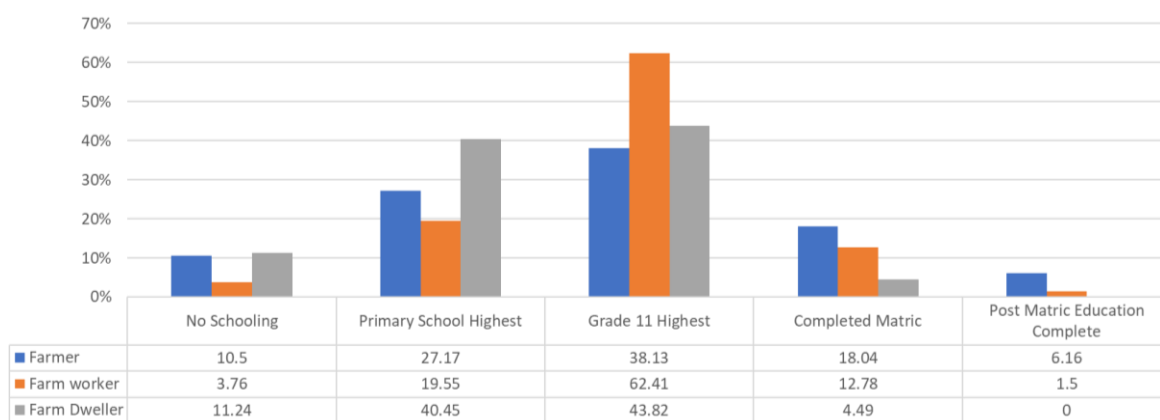


Figure 5.3: Self-reported educational attainment of female-headed households by agrarian activity, 2023

The current study found that more than 82% of farm workers had completed their primary or secondary education followed by farm dwellers (more than 76%) and farmers (more than 59%). There has been an increase in the number of people who have completed a post-matric education. This is higher in male households than female households. There is great value that is placed in educational attainment within agrarian households. Education does not only give one the ability to read and write but enables its recipients to seek a better and more prosperous future. Education allows agrarian households to grow their human capital. In economic theory, human capital refers to skills that are gained through an institutionalised system of learning. However, its downside is that other non-institutionalised methods of learning are not captured. Having access to education accumulates this human capital and assists one to obtain better jobs which may not be related to the agricultural sector. The value placed on education can be seen throughout the two agrarian household surveys.

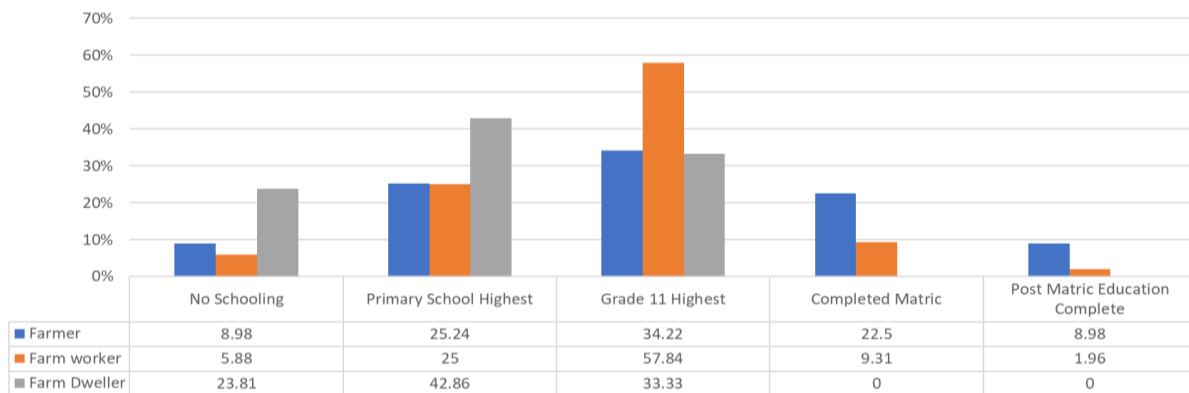


Figure 5.4: Self-reported educational attainment of male-headed households by agrarian activity, 2023

5.2.3 Organisations and associations

Table 5.3 presents the organisations and associations that different AHs could become a part of including farm associations, trade unions, churches, and political parties. In this study, AHs organised themselves largely in religious organisations with female-headed farmer households having almost 90% and male-headed almost 65% in church membership. More than 30% of AHs headed by female and male farmers were involved and members of farmer associations. Being a member of a farmer association is crucial for the development of small-scale agriculture because these organisations defend the rights and interests of farmers, advance their skills, accelerate up agricultural modernisation, improve crop yields, enhance farmers' quality of life, and expand the rural economy. There was a reluctance of farmers in both female and male-headed households to form part of trade unions despite the associated benefits of collective bargaining. Women were more reluctant to get involved in trade unions than males. Both female and male-headed households had the largest share of membership in church with female-headed farmers households having almost 90% membership and male farmers with more than 70%.

In female and male-headed households, farm workers had very little participation in farm associations similarly to their participation in trade unions with membership of less than 10%. Farm workers also had low church membership compared to farmers and farm dwellers but were involved in political parties. Trade unions are an important avenue for collective bargaining. However, they recorded the least observations in the membership categories. The lack of trade union membership for farm workers is concerning as trade unions play a crucial role in defending and enhancing their members' human rights and interests. This presents an opportunity for CBOs and NGOs to mobilise communities to join organisations that advance their interests. The majority of farm workers in both female and male headships were members of church organisations with 57% and 46% respectively. Compared to trade unionism, the political party membership

was more for both female (14%) and male (12%) headed households. Female farm workers participated more in political party organisations than their male counterparts. This may be a result of female farm workers needing more political representation to address some of their employment conditions. Farm dwellers had low membership in both farm associations and trade unions in both female and male-headed households. Church membership was more than three-quarters in male-headed and approximately 73% in female-headed households. Political party membership had the second largest membership in both female and male-headed households. Male participation in political parties was greater than female with membership levels around 23% and 6% respectively.

The 2010/2011 report results also zoomed into some organisations that agrarian households were a part of. Majority of the respondents had at least one member of their household a part of an organisation. Members of households in rural settings became involved in religious institutions in high numbers (87%) while only a slight majority (54%) were involved in political parties. Burial societies and savings groups (self-help organisations) accounted for 55% and 30% respectively. Just above 50% of the members were part of a producer structure like farmers association, commodity producers’ associations or commercial farmers unions and almost 20% were members of some movements, campaign or community-based organisation. There is a high level of organisation, around 10% of off arm and on farm members were members of trade unions and around 30% of the farm dwellers were involved in trade unions.

Over the years there has been a significant decline in organisational involvement in agrarian communities. Political and trade union activity has also decreased. One might attribute the decline to a few things. Firstly, there has been a casualisation of labour on farms leading to farm owners becoming more emboldened to dismiss farm workers should they become problematic. Secondly, political apathy caused by a lack of improvement of farm workers/farm dwellers conditions. Finally, a sense of hopelessness which has led many farm workers to turn to religious organisations. The high level of religious participation can be viewed in the context of households that are in dire need of hope for a better future. However, the study did not go deep into the reasons why agrarian households were not organising politically. This opens space for CBOs and NGOs to penetrate and get a better understanding of the agrarian environment.

Table 5.3⁵: Summary of the self-reported share of AHs with membership in different organisations and associations, 2023

	Female-Headed Household (Share=%)	Male-Headed Household (Share=%)
--	-----------------------------------	---------------------------------

⁵ This table does not equate up to 100%. However, church membership remains the most preferred organisation/association among AHs

Organisations and associations	Valid Obs. [N=660]	Farmers (n=438)	Farm worker (n=133)	Farm dweller (89)	Valid Obs. [N=637]	Farmers (n=412)	Farm worker (n=204)	Farm dweller (n=21)
Farm Association	135	30.37	0.75	1.12	142	33.50	1.47	4.76
Trade Union	15	1.37	6.02	1.12	26	16	10	0
Church	526	87.67	57.89	73.03	404	71.12	46.57	76.19
Political Party	130	24.20	13.53	6.74	137	26.21	11.76	23.81

Note: *N* = total number of observations excluding missing observations. *n*= represents the number of valid observations that the individual variable represents. The % represents the share of individual farming activity from valid observations.

5.2.4 Agrarian household income

Table 5.4 below shows the sources of the average monthly income for both female and male-headed farming households. The female farmers account for the majority of farmers with more than 50%. The sources of income for each farming AH are wages/salaries, social grants, other income (remittances), income from business, and farming income. The total average income each household receives, and the income each individual household member receives is presented. Majority of female and male households reported to receive income from social grants followed by wages/salaries.

Wages/salaries were the second highest income source for farming households. The average salary/wage received from female households was roughly R7705 and R9501 for male households. On both accounts, male-headed households received more income than female-headed households. However, the largest source of income for both female and male farming households was from business and farming income. On average, both female and male business income was more than R10 000 and farming income was more than R20 000. However, on both accounts, male-headed households received more income than female-headed households. The total average income that female households (R8285) received is significantly lower than that of male households (R14538). This difference was starker with individual members where individual members of male household's income (R4410) was on average more than double that of individual members in female households (R2180). This was apparent throughout all the sources of income. The findings of this table are in line with literature that show the existing of income and gender inequality within AHs.

Table 5.4: Self-reported monthly income for female and male-headed households, 2023

Income options	Female Farmers [N=438]			Male Farmers [N=412]		
	Valid Obs.	Average	Median	Valid Obs.	Average	Median
Wage/Salary	111	7705.61	3000.00	146	9501.93	5000.00
Social Grant	365	2119.93	2000.00	282	2273.79	2000.00

Other income	83	2227.71	1000.00	48	4187.92	1000.00
Farming income	20	22483.85	7120.83	53	23688.70	7975.00
Business income	109	12472.76	1500.00	168	15033.52	4500.00
Total income	438	8285.69	2755.00	412	14538.34	4180.00
Per Capita income	438	2180.48	787.20	412	4410.82	1375.00

Note: N = total number of observations excluding missing observations.

The average monthly income source of farm workers is summarised in Table 5.5. Most of the farm workers were males with more than 60% of them in the sample. The largest sources of income for farm workers were wages/salaries followed by social grants and other income (remittances). Many the respondents, female (98) and male (198), reported to receiving income from wages while minority reported receiving other income, females (24) and males (14). Female households had higher sources of average income than male households. The value of income sources from female households was wages/salaries (R4765), social grants (R1674) and other income (R1600) higher than the wages/salaries (R3738), social grants (R1476) and other incomes (R650) of male households. Although female households, on average, received more from their sources of income, at an individual member level, males received more income than females. This means that male farm workers can spend more on goods and services and might have a ‘better quality of life’ compared to female farm workers.

Table 5.5: Source of average monthly income for female and male-headed households, 2023

Income Source	Female Farm Workers [N=133]			Male Farm workers [N=204]		
	Valid Obs.	Average	Median	Valid Obs.	Average	Median
Wage/Salary	98	4765.56	3850.00	197	3738.71	3480.00
Social grant	88	1674.77	1500.00	89	1476.53	1020.00
Other income	24	1600.00	1500.00	14	650.00	500.00
Total Income	133	5191.80	4500.00	204	4401.42	3750.00
Per Capita Income	133	1411.12	1000.00	204	1915.41	1605.83

Note: N = total number of observations excluding missing observations.

Table 5.6 summarises the self-reported source of household income per month for female and male-headed households of farm dwellers. Majority of farm dwellers are female with more than 90% of the interviewed sample identifying as such. The sources of farm dweller income were salaries/wages, social grants and other incomes. Most respondents reported to receive income from social grants while others reported receiving income from wages and other income. Social grants were a great contributor to household income for both female (R1875) and male (R2580) households. Female households had a larger average total income than male households. However, individual members from male households received more income.

Looking at the sources of income of households, almost 60% of respondents indicated wages as their primary source, according to the 2012 ARHE report. This is mainly due to most respondents being farm workers. Social grants, self-employment and agricultural production were other sources of income for households with grants being the most amongst the group. Social grants were not limited to child support grants but included old age pensioner grants. Self-employed and agricultural producers accounted for a very small share of source of income. Additionally, the living conditions of people from rural areas have improved particularly for women. Average household monthly income was R2606 (with grants and wages being very important). The average monthly salary/wage of each individual was R642.72 (R21.56 per day) and the South African food poverty line was R240 per month.

The sources and the level of income vary within the different agrarian households. For instance, the largest source of income for farming households is business and farming income, whereas for farm workers and farm dwellers it was wages/salaries. Additionally, women receive significantly lower wages on average across all livelihood activities (farmer, farm worker and farm dweller). The income disparity is worse within farmers where the income gap between female and male farmers is more than double. A golden thread that emerges from the sources of income of agrarian households is that they are heavily dependent on their primary activity i.e. farmers receive farming/business income, farm workers and farm dwellers receive wages. In addition, the income inequality within the different households draws to light the gender disparity in agrarian households. Despite female-headed households being larger than male-headed households (female households on average are 4 to 5 members compared to 3 to 4 males), the total average income of female households is far less than that of male-headed households. A more significant difference is the value of per capita of households. On average, male-headed households, particularly farmers, earn more than double what female-headed households earn. The per capita value points out the startling yet consistent inequality levels within AHs.

Table 5.6: All self-reported household income per month for female and male-headed farm dwellers households, 2023.

Income source	Female Farm Dwellers [N=89]			Male Farm dwellers [N=21]		
	Valid Obs.	Average	Median	Valid Obs.	Average	Median
Wage/Salary	47	4406.54	4500.00	8	2697.50	2290.00
Social Grant	75	1875.13	1980.00	18	2580.00	2085.00
Other income	12	1503.83	1000.00	2	5700.00	5700.00
Total income	89	4216.74	4500.00	21	4118.84	4000.00
Per capita income	89	1018.59	1000.00	21	1111.14	1000.00

Note: N = total number of observations excluding missing observations

Figure 5.5 summarises the average household income of agrarian households. More specifically, total and per capita income of female-headed agrarian households by livelihood activity (farmers, farm workers and farm dwellers). Female farming households were the highest income earners within agrarian households. Their total average income was roughly R8285 followed by farm workers (R5191.80) and farm dwellers (R4216.74). Farmers are engaged in several income generating activities from producing to selling their produce in the market for profit. Individual farmers earned approximately R2180, followed by farm workers (R1411.12) and farm dwellers (R1018.59). Female farmer’s per capita average income is more than double that of farm dwellers. A closer look at the incomes, female farm workers had a household income of R5191.80 with the main source of farm worker’s income being wages/salaries and their households grants and other incomes like remittances. Individual farm workers received R1411.12, more than 25% of the household income. Farm dwellers received the lowest income levels across all livelihood activities.

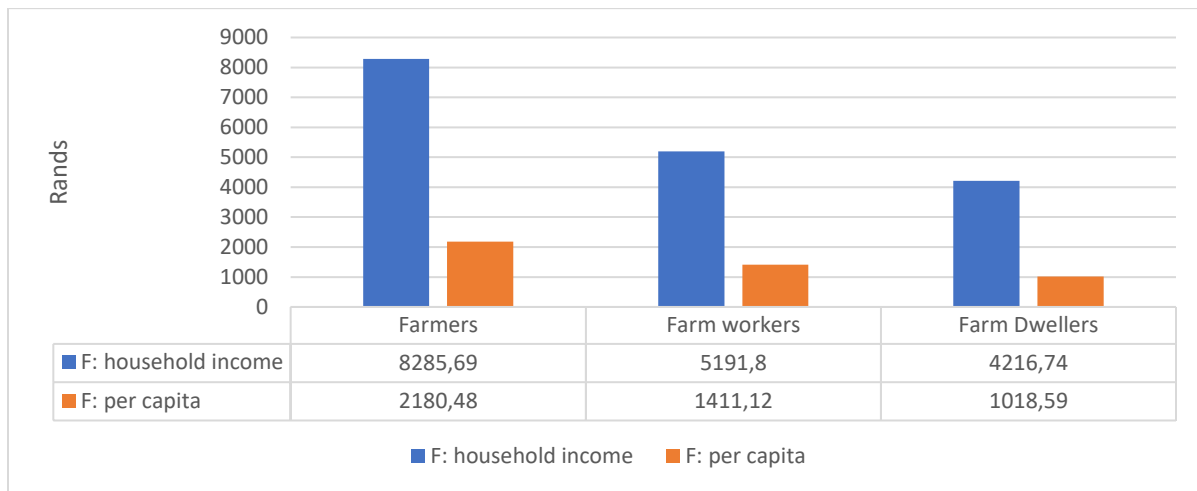


Figure 5.5: Total and per capita average household income per month for female-headed households, 2023

Note: The average incomes represents the self-reported income

Furthermore, Figure 5.6 presents and summarises the total and the per capita average monthly income of male agrarian households according to respective livelihood activity. Farmers (R14 538.34) had the largest household income followed by farm workers (R4401.42) and farm dwellers (R4118.84). Farmers had more than three times the income of farm workers and farm dwellers. Compared to their female counterparts, male farmers earned more than female farmers. In contrast women farm workers and farm dwellers received more income than their male counterparts. This may be due to female agrarian households being larger than male households and contributing more. On the other hand, individual income from male farmers, farm workers and farm dwellers are larger than that of females. Thus, male farmers, farm workers and farm dwellers have a higher income than women. Findings from the 2012 report stated that average incomes from agrarian households were R2606.28. The report also argued that household incomes would rise over

the coming years due to the impact of inflation. This was found to be true as household incomes have increased since the 2012 report.

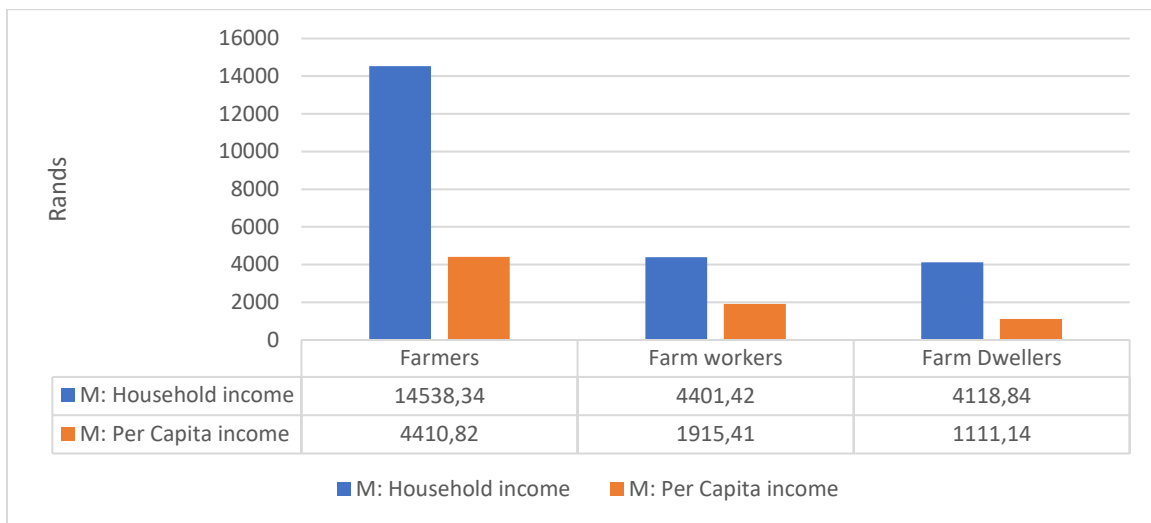


Figure 5.6: Total and per capita average household income per month for male-headed households, 2023
Note: The average income represents the self-reported income

Figure 5.7 divides the per capita average income of agrarian households into quintiles. Quintiles are a range of data that have been divide into five equal parts. In this data set, the quintiles represent the income data divided into five equal parts. The first quintile represents the lowest 20% and the last quintile represents the highest 20% of individual income. Quintiles 1 and 2 represent the bottom 40% of the income data. Although male households have higher per capita income, they remain well below the South African poverty line. The South African national poverty line, often referred to as the extreme poverty line, is R760. In Quintile 3, female households (R1069.03) have higher per income than male households (R1062.73). However, the income level is below the lower bound poverty line. The lower bound poverty line represents the value where basic necessities are also included like clothing and toiletries. Quintile 4 has an average per capita income of R1804.56 for female households and R1867.79 for male households. Quintiles 1, 2, 3 and 4 are all below the national minimum wage. This means that 80% of individuals within households earn way below the poverty line. Quintile 5 has an average per capita income of more than R9000 for both the female and male households. The average income in quintile 5 is greater than the income of the other four quintiles combined. Male households remain the highest income earners with R9689.69 and female households R9292.56.

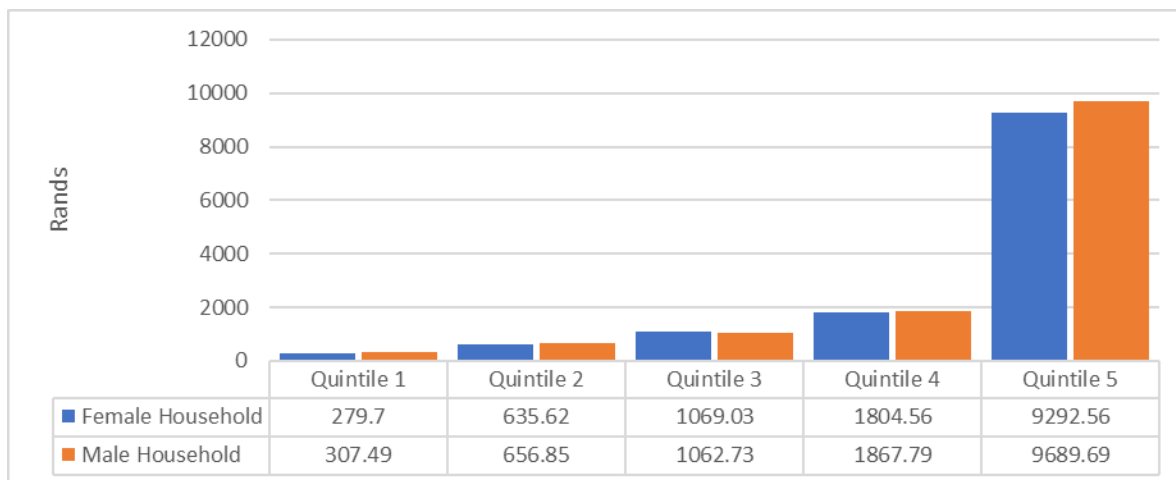


Figure 5.6: Average per capita monthly income of agrarian households by quintile, 2023

Note: The average income of agrarian households is self-reported income levels

Figure 5.8 summarises the average per capita monthly food expenditure of male and female households. In the first quintile, the per capita food expenditure (R307.49) of male households is greater than the per capita food expenditure of female households (R279.70). Quintile 2 and Quintile 3 are below the poverty line. The poverty line refers to the minimum income required from individuals to afford their basic nutritional intake. As mentioned above, the food poverty line is R760. As a result, the households within the first three quintiles are considered poor households that are unable to meet their most basic nutritional requirements. However, agrarian households are engaged in various farming activities and may produce their own food for consumption to address some of these deficiencies. Quintile 4 is above the food poverty line with a monthly per capita food expenditure of R836.05 for females and R945.88 for males. Quintile 5 spends more on food than the bottom three quintiles combined. This presents a unique problem and will be discussed further below.

The 2012 report presented the baseline average income per household member the value being R646.72. The food poverty line in South Africa in 2012 was R515 and R949 (based off 2008 values). This value was multiplied by the number of people within a household to determine the required amount to meet the basic nutritional requirements of households. Four-member households would be between R2060 and R3796. This value was referred to as the food poverty baseline and was R1040. Any expenditure below this value would constitute poverty within the households where they only afford food that would provide about 70% of their minimal nutritional requirements. The report found that households expenditures are around the poverty line.

5.2.5 Agrarian household food expenditure

Figure 5.8 summarises the average per capita income and food expenditure of agrarian households. The results found that the income levels of more than 40% of individuals are well below the poverty line. Women are worse off than men despite more than 60% of both households' food expenditure falls below the food poverty line. This means that individuals within households do not have the minimum money required to afford the basic daily energy intake. Thus, these individuals are extremely poor. The food expenditure was well below the food poverty line for 60% of the households, more so in female households. Additionally, the income levels of individuals show that more than 80% of households earn less than the national minimum wage. Compared to the results of the 2012 study where the agrarian households' expenditure was around the poverty line, the results of this study show that the agrarian households have become worse off in the past decade.

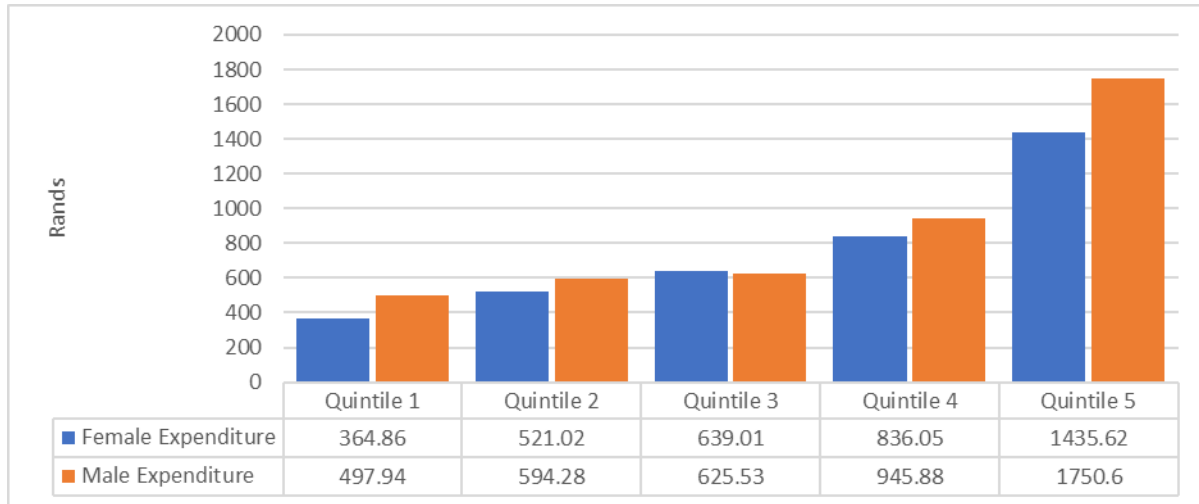


Figure 5.7: Average per capita food expenditure of agrarian household by quintile, 2023

Note: The average food expenditure of agrarian households is self-reported

Figure 5.9 summarises the self-reported average monthly food expenditure of farming households. The food expenditures were separated into the five categories, fresh fruit and veg, cereal/starch, fresh animal protein, processed animal food, processed food, and take aways. The largest share of female respondents bought Starch (405), followed by processed food (367) and fresh animal protein (360). In males, the largest share of respondents buys starch (396), followed by processed food (366) and fresh animal protein (357) respectively. Figure 5.9 shows that female-headed households spend the most on fresh animal protein (38% of expenditure), followed by cereal/starch (36%) and processed food (25%).

Households spend the least on take aways and fresh fruit and vegetables with take aways making approximately 10% of food expenditure and fruit and veg roughly 13%. Male-headed families also spend

more on fresh animal protein (48%), followed by cereal/starch (32%) and processed foods (26%). Female farmers spend the least amount of money on take aways (11%). In contrast, males spend the least on fruits and vegetables. This is concerning as fruits and vegetables are high in micronutrients like vitamins and minerals which the body needs. Although the female and male households have the same spending patterns, female households spend more on fresh animal protein and cereal starch. Male households spend more on processed foods and take aways. Even though male households spend more on fruits and vegetables than females, fruits and vegetables are their lowest food expenditure.

The findings emphasise the disparity between male and female overall food spending per household. Male farmer households spend an average of R3186.37 on food per month, whereas female households spend an average of R2465.47. Farmers spend more on fresh animal protein, whereas female families spend an average of R375.83 on fruits and vegetables and men spend R475.23. This means that farmers spend money on these products; just because they produce them does not imply, they will not buy them.

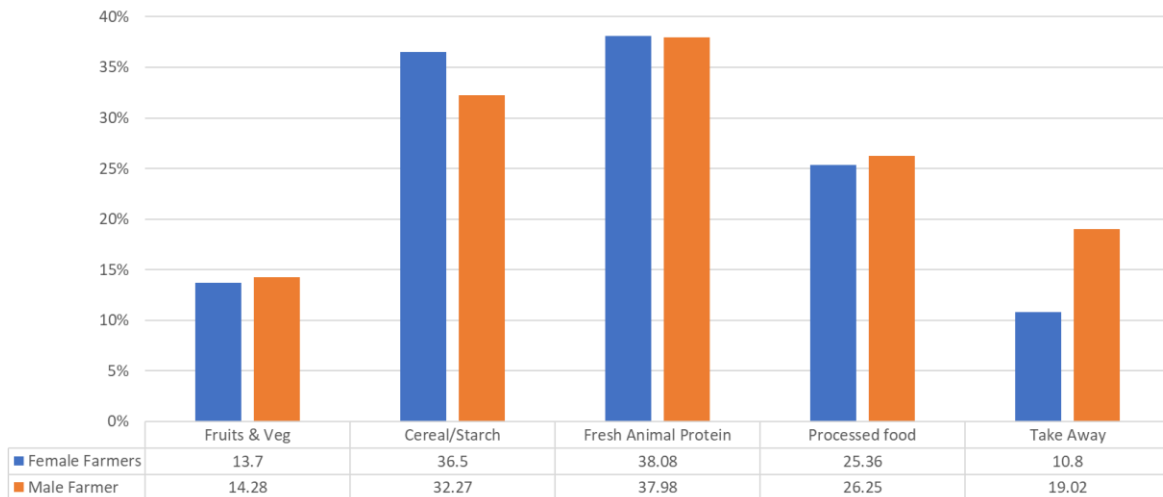


Figure 5.8: Monthly share (%) of different food expenditures of farmers, 2023

Note: The food expenditure of agrarian households is self-reported

Figure 5.10 below summarises the self-reported food expenditure patterns for farm workers. The expenditure on food is shown according to the food categories. The number of farm workers recorded is 124 female and 195 male farm workers. The largest share of female respondents (114) purchase starch, followed by processed foods (107) and fresh animal protein (100). Unlike females, the majority of males purchase processed foods (187), followed by starch 182 and fresh protein animal protein (168). The results show that female and male farm workers spend the least on fruits and vegetables. This presents a problem, as households are still consuming food, however, that food does not have the basic nutritional requirements. Female farm workers spend the most money on fresh animal protein (R1050.70 on average), followed by

starch (R634.12) and processed food (R615.56). Male farm workers spend an average of R898.17 on fresh animal protein, R676.22 on processed foods, and R624.36 on starches.

There is a similar consumption pattern in both male and female households. This raises a concern of a phenomenon referred to as hidden hunger. Hidden hunger is different from hunger which falls outside the conventional descriptions of hunger. It is another form of malnutrition wherein the absorption of basic nutrients like vitamins and minerals is too low. Scholars have referred to it as invisible hunger because households are unable to see this type of hunger, it is hidden. In this case, farm workers have no other source of nutrient intake thus making it plausible to believe that cases of hidden hunger within agrarian households are prevalent.

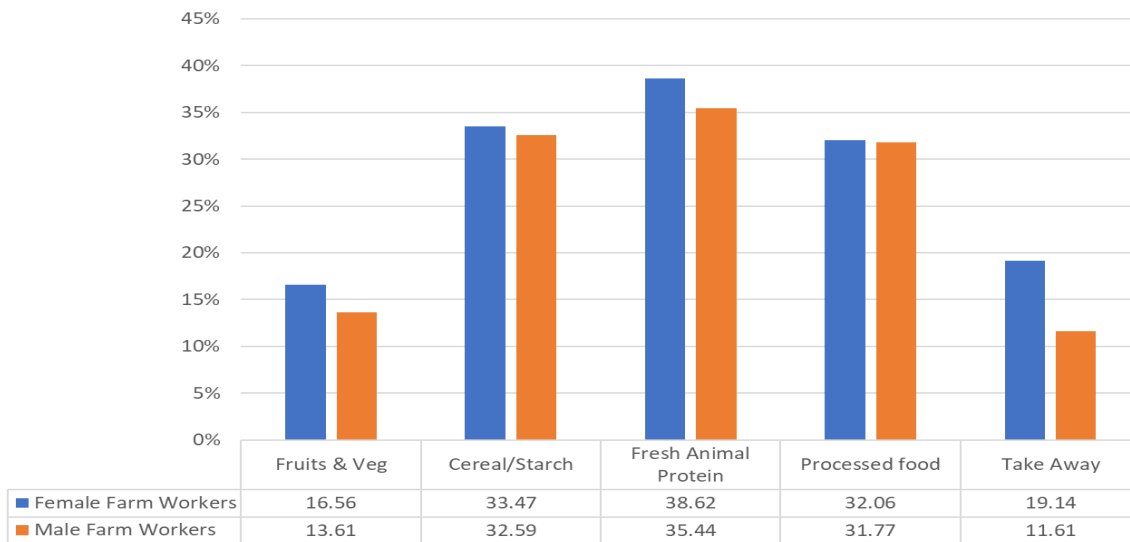


Figure 5.9: Monthly share (%) of different food expenditures of farm workers, 2023

Note: The share of food expenditure is self-reported

Figure 5.11 below shows self-reported agrarian household food spending by farm dwellers. Eighty-one observations are made for female-headed households and 20 recorded for male-headed households. Most female-headed households purchase starch (77), processed foods (76), and fresh animal protein (67). While the majority of males (20) purchase processed foods, followed by fresh animal protein (19) and fruit and veg (13). Female-headed household have a high share of expenditure on take aways (65%) followed by fresh animal protein (38%) and processed food (31%). Their share of expenditure is the lowest on fruits and vegetables (19%).

Having the largest share of food expenditure on take aways is worrisome. The expenditure could be a result of take-away foods being cheaper than processed foods and animal proteins. The study did not investigate whether the take-away was cooked meals, food from other households or fast foods. Noting that processed foods make up the third largest food expenditure, concerns could be raised on the health benefits, or lack thereof, of spending on highly processed foods and take aways in large quantities while having very small share of expenditure on fruits and vegetables. The health and daily nutritional requirements of the children within these households is likely to be affected.

Male households have similar expenditure patterns without the high expenditure on take-aways. The largest share of male households is processed foods (32%) followed by take aways (32%) and cereal starch (31%). Similar to female households, the share of expenditure on fruits and vegetables are the lowest. Processed foods and cereal/starch tend to be cheaper than other food items. Take-aways were the second largest expenditure. Within farm dweller households, the case can be made for instances for hidden hunger. Processed foods, starch/cereals and take-aways are foods that do not have sufficient nutritional value. Also, fruits and vegetables are high in vitamins and minerals that are essential for one's basic nutritional requirements.

The 2012 study investigated the frequency of food consumption within agrarian households. It became apparent across the entire sample that bread (cereal/starch) and vegetables were often consumed by households. Meat and chicken (Fresh animal Protein) were consumed the least. Understandably, meat products are expensive in the market. The sample was biased towards Western Cape where the staple is bread. More than 70% of the respondents consumed cereal/starch more than three times a week and more than 50% consume cereal/starch daily. The largest fresh animal protein consumers were respondents from Western Cape (20%) who consumed fresh animal protein everyday while other provinces consumed less than 3%. Between 20% and 25% of the respondents ate fruit every day except for the Eastern Cape where more than a quarter of the respondents never ate fruit. Western Cape had the highest consumption of dairy products (fresh animal protein) while other provinces consumed less than 20%. Limpopo and Eastern Cape had the most respondents who had never consumed fresh animal protein. Almost half the respondents in Eastern Cape and almost a third in the Western Cape consumed vegetables daily.

Having reviewed the 2012 report, the results of the current survey point to a bleak picture. Poorer households consume more processed foods, cereal starch/cereal and take-aways. These food items are high in starch and do not contain the necessary minerals and vitamins required by your body. In female farm dweller households, there was a high share of expenditure for take-aways. This may be a result of the large

number of members within the households. Across all livelihood activities, female households have a larger share of their expenditure dedicated to food. Female households have a higher expenditure share of fruits and vegetables than male households except in farming households.

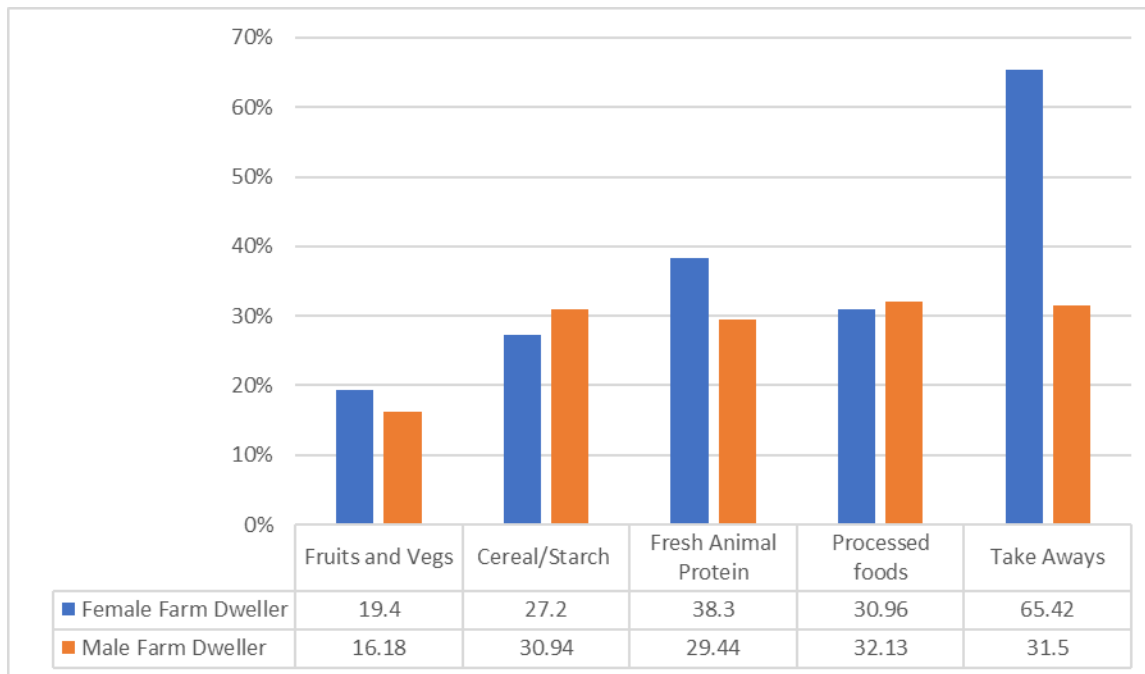


Figure 5.10: Monthly share (%) of different food expenditures of farm dwellers, 2023

Note: The share of food expenditure is self-reported

5.2.6 Agrarian household non-food expenditures

Figure 5.12 below shows the total non-food household expenses of all sampled agrarian households in this study. The non-food expenditure items are categorised as utilities, education expenses and debt repayment. Debt repayments were the largest share of non-food expenses among both female and male-headed agrarian households with 44% for female households and 46% for male households. Public transport expenses accounted for the least share of expenditure among agrarian households, with 23% for female households and 26% for male households. Farm workers who live off farm may have the added benefits of being picked up and dropped off after work by farm owners. Education is a sizable share of household expenditure. Approximately 30% of female households' expenditure is dedicated towards education expenses and more than a quarter in male households. This shows the level of investment that households have placed on their children's education and their futures. The debt repayment share is high compared to the other shares of expenditure. This signals that households have high levels of debt resulting from household financing their food expenditure by debt.

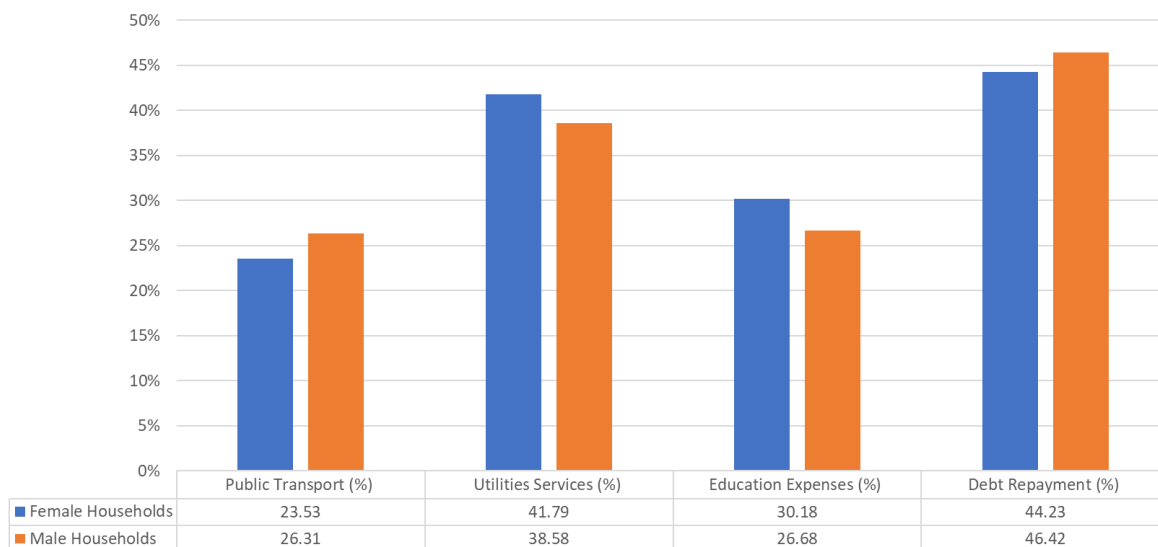


Figure 5.11: Total non-food household share of expenditure per month, 2023

Note: Share of total food expenditure is self-reported

5.2.6.1 Water and energy sources

Figures 5.13 and 5.14 summarise the primary source of drinking water for female and male households. The sources vary from tap in-house, tap in-yard, borehole tank water, nearby stream and communal tap. In female households, a fifth of farmers get their water from a tap in-house while the majority sources their water from a tap in the yard. Less than 10% of them source their water from a nearby stream. Stream water has associated health risks. A quarter of farm workers source their water from tap-yard and borehole water in tank. Less than 10% of farm workers source their water from communal taps. More than 50% of farm dwellers have a tap in-house that they use as a source of their water.

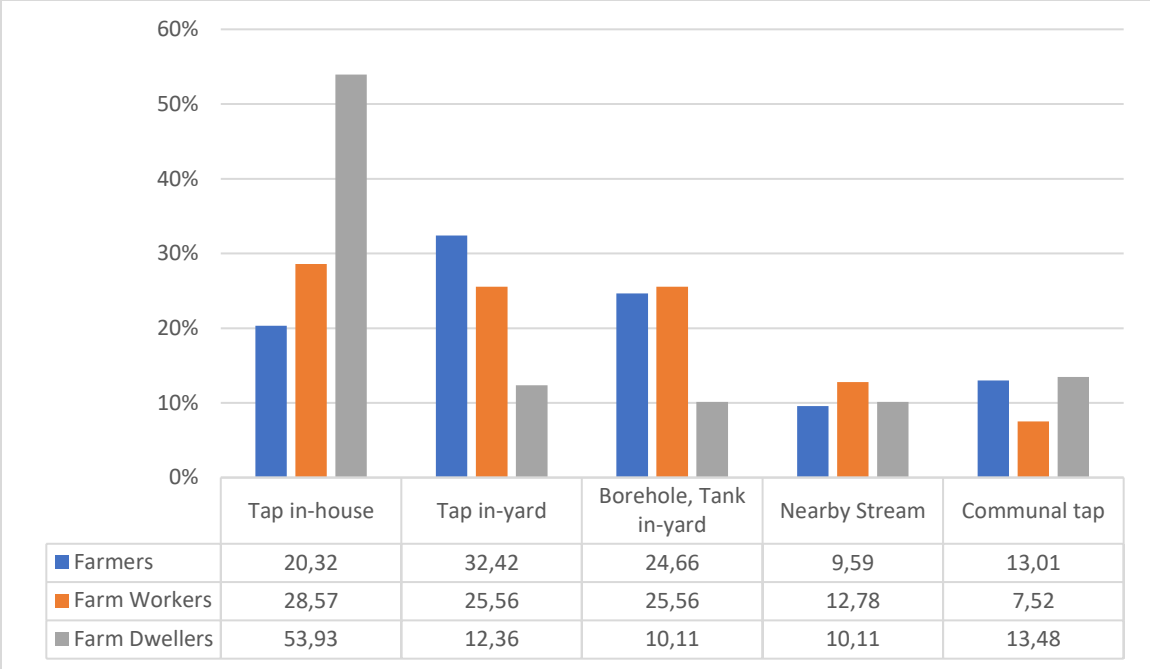


Figure 5.12: Primary source of drinking water of female households, 2023
Note: This is the self-reported source of drinking water

On the other hand, male households have similar water source patterns to females. More than 30% of farmers have in-house tap that they use for their water consumption and 35% of them have in-yard taps. Male farmers rarely source their water from natural sources like streams as a result, only 5% of farmers sourced their water from streams. Farm workers sourced their water from a tap in-yard (21%) and from a tap in-house (43%). Farm dweller’s main source of water was in-house tap (38%) followed by in-yard tap (28%). Almost a fifth was sourced from a communal tap.

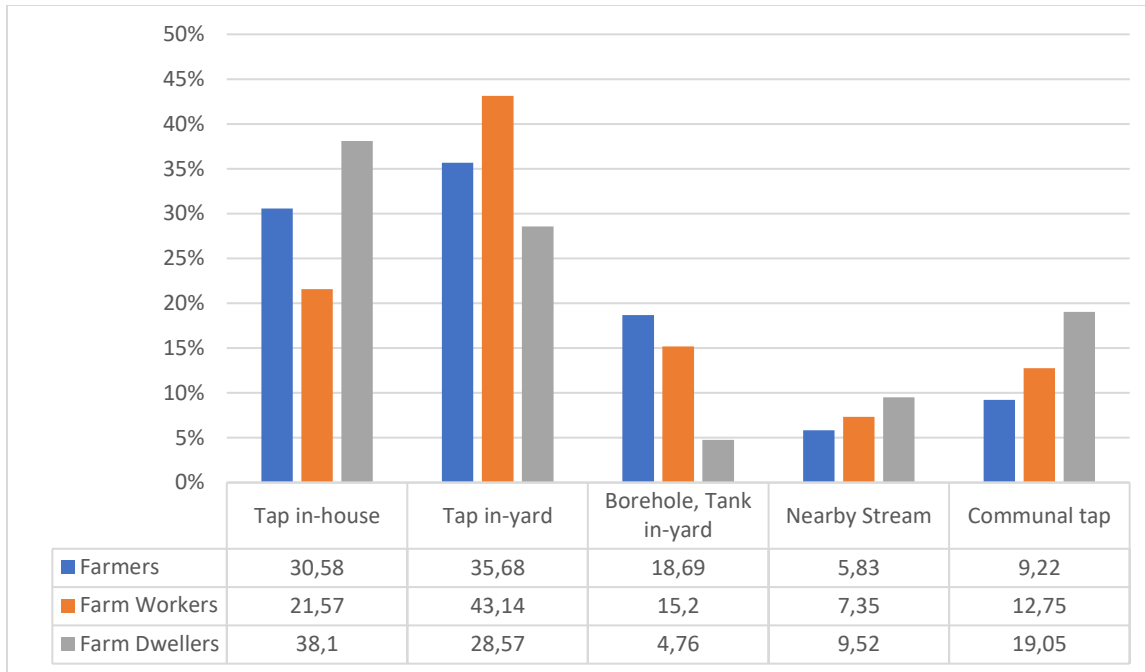


Figure 5.13: Primary source of drinking water of male households, 2023

Note: This is the self-reported source of drinking water

Figures 5.15 and 5.16 below describe the main energy sources utilised by female and male-headed agrarian households. The energy sources in the table include electricity from Eskom, wood or coal usage, liquid petroleum gas and renewable energy sources. Electricity from Eskom is the most common energy source used among both female and male agrarian household. More than two-thirds of energy was sourced from Eskom from female farming, farm worker and farm dweller households. Less than a quarter of livelihood activities sourced wood and coal for energy. Renewable energy is crucial for the fight against climate change and path towards net zero. Farm dwellers are leading in the use of renewable energy with roughly 4% as a source of energy.

Distinctively, 442 female-headed households and 440 male-headed households rely on Eskom for their energy needs. Renewable energy accounted for the least energy source used among agrarian households, with only 24 female and 42 male-headed households relying on this for their energy requirements. When considering the different agrarian households, the distribution of the reliance on electricity from Eskom as a main energy source still stands. With 66% of female farmers, 68% of female farm workers and 69% of female farm dwellers households using electricity from Eskom as their main energy source. Similarly, male-headed farmer (73%), farm worker (61%) and farm dweller (67%) all depend on Eskom as their main energy source.

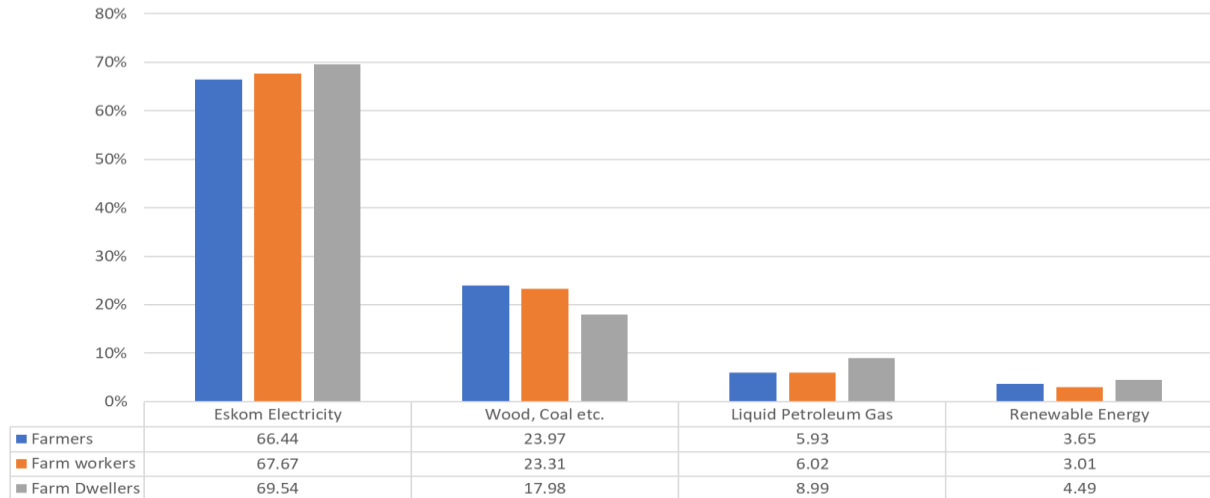


Figure 5.14: Self-reported Primary source of energy that female households use, 2023

Male households had similar sources of energy. More than 60% of all agrarian households sourced their energy from Eskom. Farmers sourced almost two-thirds of their energy from Eskom and farm dwellers sourced more than two-thirds from Eskom. The use of wood and LPG was marginal with less than 15% of users who source their energy from these inputs. However, almost a quarter of farm workers made use of wood and coal for energy while farmers and farm workers made use of less than 15% as a source. Renewable energy was largely supplied to farm worker and farm dweller households (almost 10% each).

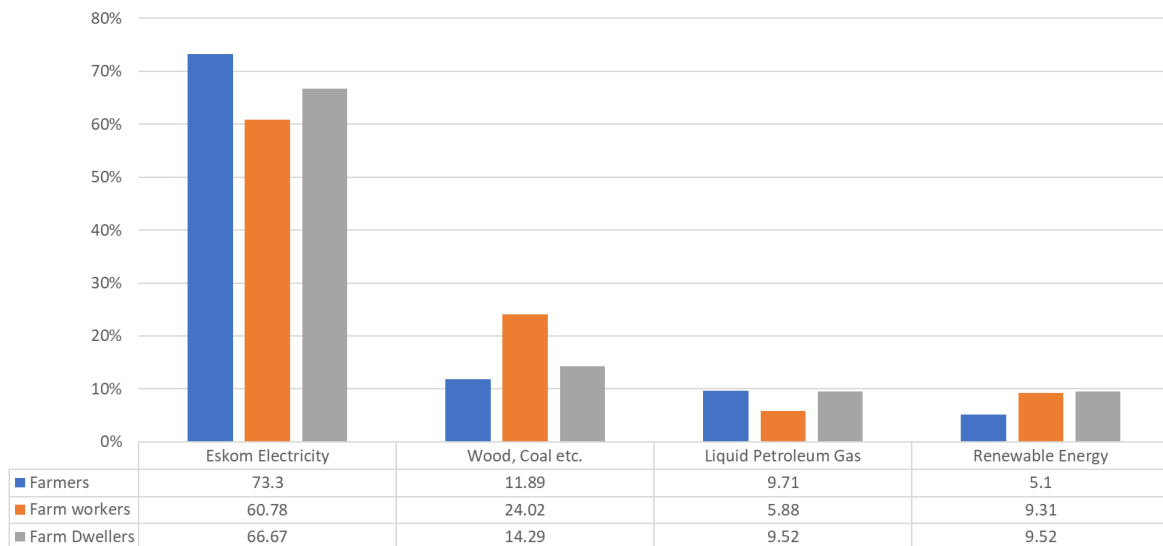


Figure 5.15: Self-reported Primary source of energy that male households use, 2023

5.2.7 Summary

This section summarises the key points on agrarian households (AHs) and their demographics that have been provided. Regarding education, there has been a significant increase in the educational attainment of AHs. Considering some organisations, there has been a significant decline in political and trade union activity with AH, however, there has been a consistent involvement in religious organisations. Income received considerable attention. On average, women received lower income across all livelihood activities. Additionally, the income levels of more than 40% of individuals and more than 60% of AH were well below the food poverty line. The study also highlighted that poorer households consumed more processed foods, cereal/starch and take aways. Notably, women had a larger share of their expenditure dedicated to food than men. Finally, AHs suffered from hidden hunger. With these aspects of the demographics of Survey participants in mind, this section moves on to explore smallholder and subsistence farmers farming activity.

5.3 Smallholder and subsistence farmers farming activity

Smallholder and subsistence farmers represent a significant portion of the agrarian households sampled in this study. In this research, smallholder farmers represent farmers who partake in farming with the purpose of selling their produce for an income, whereas subsistence farmers are identified as farmers who farm purely to sustain their family's food needs. Among others, this section will provide an overview of the differences in land access and use amongst men and women in these households. Lastly, the changes that have occurred in smallholder and subsistence farming households in the last 10 years will be highlighted.

5.3.1 Farming activity by agrarian household

Table 5.7 below presents the overall percentage share of farmers interviewed by district municipalities, categorised into crop, livestock, and mixed farming. In this study's context, mixed farming refers to individuals who partake in crop and livestock farming concurrently. According to this table, Sarah Baartman and Amathole had the highest numbers of farmers recording 116 and 115 farmers respectively. Cape Winelands however, had the least number of farmers, recording only 5 farmers. The majority of participants, totaling 313, were engaged in mixed farming whereas livestock farming had the least number of participants (only 213 livestock farmers were recorded). The reason behind this distribution may be attributed to the fact that mixed farming allows for diversification, spreading out risk and potentially increasing income streams. Whereas, livestock farming requires ongoing care and maintenance, such as feeding, healthcare, and shelter, which can be more labour-intensive and costlier. In terms of crop farming, Enhlanzeni (54%) and Vhembe (54%) districts showed higher involvement compared to other farming categories. Conversely, Cape Winelands and Namakwa reported zero crop farmers. Livestock farming was predominantly represented by Namakwa (91%) and Cape Winelands (80%) districts. Uthukela (77%) and Amathole (66%)

districts demonstrated notable engagement in both crop and livestock farming, while Overberg and Namakwa (both at 9%) had the lowest presence of these farmers.

Table 5.7: Overall Self-reported share (%) of interviewed farmers from district municipalities, 2023

District Municipality	Valid Obs. [N=812]	Agrarian household category		
		Crop Farming (n = 286)	Livestock Farming (n = 213)	Mixed Farming (n = 313)
Amajuba	41	7.32	19.51	73.17
Amathole	115	27.83	6.09	66.09
Bojanala	73	24.66	47.95	27.40
Cape Winelands	5	0.00	80.00	20.00
Ehlanzeni	105	54.72	1.89	43.40
Fezile Dabi	32	9.38	68.75	21.88
Namakwa	53	0.00	90.57	9.43
Overberg	79	53.16	37.97	8.86
Sarah Baartman	116	50.00	37.93	12.07
Sedibeng	53	41.51	13.21	45.28
Uthukela	70	18.57	4.29	77.14
Vhembe	69	53.62	4.35	42.03

Note: N = total number of observations excluding missing observations. n= represents the sub total. The % represents the share of individual farming activity from valid observations.

Table 5.8 below illustrates the overall percentage distribution of crop, livestock, and mixed farmers categorised according to gender. According to this table, females hold the greatest share in crop farming as compared to male crop farmers. Precisely, about 44% of females indicated that they were involved in crop while only 25% of males indicated this. Conversely, in relation to livestock farming, males take the lead with 37%, while females account for 16%. In mixed farming, females hold a slightly higher share at 39%, whereas males hold a share of about 38%. The difference between the two sexes is not significant. In addition, it is important to note that there were more female than male respondents in the sample of farmers from this study.

In the 2011/12 ARHE report, it was found that female farmers accounted for 51% of the total, slightly outnumbering their male counterparts at 48%. This trend is consistent throughout the data presented in Table 5.8 below. Across all categories, female farmers are the majority, except in livestock farming.

Table 5.8: Overall share (%) of farming activity among female and male farmers. 2023

Farming type	Valid Obs. [N=812]	Gender	
		Female (n = 419)	Male (n = 393)
Crop Farming	286	44.39	25.45
Livestock Farming	213	16.23	36.90
Mixed Farming	313	39.38	37.66
Total	812	100	100

Note: N = total number of observations excluding missing observations. n= represents the sub total. The % represents the share of individual farming activity from valid observations.

5.3.2 Main purpose of farming activity

Table 5.9 presents a summary of the main purpose of farming activity within the agrarian households. The purpose of farming ranges from: farming as a main food source, farming as an additional source of food, farming as a main source of income and farming as an extra source of income. For the purpose of this study, those who farm as a means to derive income are identified as smallholder farmers, while those who farm to sustain their family's food needs are identified as subsistence farmers. This study found that in relation to crop farming more females are involved in crop farming compared to males and both genders mostly do this type of farming for subsistence purposes. However, the opposite distribution is found with regards to livestock farming. This is because more men were found to participate in livestock farming than women and majority of the respondents in both genders indicated that they do this for the purpose of generating an income. The varying distribution between crop and livestock farming reveals the inequalities between men and women in the agrarian sector, particularly with regards to the economic opportunities present in this sector.

To put this into perspective female (41%) and male (47%) crop farmers as well as female (45%) mixed farmers farmed primarily for subsistence purposes. An additional 30% of crop farmers farmed for an extra source of food. Around 70% of female crop farmers focused on producing food for consumption. Male crop farmers main purpose for farming was also for subsistence purposes (76%).

Livestock farmer's main purpose of farming was to generate an extra income. Around 40% of female and male farmers engaged in livestock farming. In addition, approximately 40% of female livestock farmers farmed for an extra source of income compared to 48% of male livestock farmers. Collectively, more than 80% of livestock farmers engaged in farming for income purposes. Male mixed farmers farmed mainly for income purposes. Almost 60% of all farming activity of mixed farmers was for income purposes. Female farmers, particularly crop and mixed farmers, engage in farming for subsistence or food consumption. Whereas male farmers, both livestock farmers and mixed farmers, farm for income.

The 2011/2012 ARHE report found that more than 80% of crop farmers engaged in farming for subsistence mainly because there was a significant proportion of crop farming households that experienced hunger. Additionally, the report found that livestock was mainly for household use. However, between 50% and 60% of the respondents had indicated that they sold their livestock. This is a similar trend to the current study where the majority of female and male livestock farmers choose to sell for income. The report indicates that female crop and mixed farmers engaged in farming for subsistence purposes. On the other hand, only male crop farmers engaged in farming for subsistence purposes. Notably, crop farmers in female households were the largest share of farmers whereas male crop farmers were the smallest share of farmers.

Table 5.9: Main purpose of farming activity (crop, livestock, mixed) among farmers, 2023

Main Farming Purpose	Female Household Heads (Share=%)				Male Household Heads (Share=%)			
	Valid Obs. [N=419]	Crop farming (n = 186)	Livestock farming (n = 68)	Mixed farming (n=165)	Valid Obs. [N=393]	Crop farming (n = 100)	Livestock farming (n = 145)	Mixed farming (n = 148)
Main Food Source	159	41.40	11.76	44.85	99	47.00	6.21	29.05
Extra Food Source	92	30.65	7.35	18.18	57	29.00	7.59	11.49
Main Income Source	114	22.04	39.71	27.88	144	19.00	38.62	46.62
Extra Income Source	54	5.91	41.18	9.09	93	5.00	47.59	12.84

Note: N = total number of observations excluding missing observations. n= represents the number of valid observations that the individual variable represents. The % represents the share of individual farming activity from valid observations.

5.3.3 Main farming location

The table below shows the percentage share of the main farming locations used by farmers across the 12 district municipalities. The findings indicate that the majority of interviewed farmers rely on backyard gardens (406) as their main farming location, while a minority opt for public land (79). This could be caused by limited access to use public land like bureaucratic hurdles and/or land tenure issues. Furthermore, most farmers in the Fezile Dabi district utilise Farmland, with none utilising backyard gardens. In contrast, farmers from Cape Winelands, Overberg, and Sarah Baartman districts do not utilise farmland at all. Consequently, over 90% of farmers in these districts predominantly use backyard gardens as their main farming location, with the exception of the Cape Winelands district.

Table 5.10: Self-Reported Share (%) of Main Farming Location by District Municipality, 2023

District municipality	Valid observations [N = 619]	Main farming location (Share = %)		
		Farmland (n = 134)	Backyard garden (n = 406)	Public land (n = 79)
Amajuba	35	28.57	68.57	2.86
Amathole	109	11.01	86.24	2.75
Bojanala	46	6.52	89.13	4.35
Cape Winelands	2	0.00	50.00	50.00
Ehlanzeni	105	49.52	19.05	31.43
Fezile Dabi	10	90.00	0.00	10.00
Namakwa	9	55.56	33.33	11.11
Overberg	50	0.00	92.00	8.00
Sarah Baartman	73	0.00	95.89	4.11
Sedibeng	47	59.57	17.02	23.40
Uthukela	67	0.00	85.07	14.93
Vhembe	66	22.73	63.64	13.64

Note: N = total number of observations excluding missing observations. n= represents the number of valid observations that the individual variable represents. The % represents the share of individual farming activity from valid observations. Cape winelands had 2 observations thus inferences should not be drawn from these small samples.

Table 5.11 summarises the different farming locations that are utilised by the respondents according to their different farming activities. The different farming locations include farmland, backyard gardens and public land. Notably, backyard gardens and public land are not designated farming land. On the other hand, farmland includes land that has been designated for farming whether it be communal or private. The results point out that more than 50% of female farmers make use of farmland for crop farming and 43% of them use this for mixed farming. While the vast majority of male farmers farm on farmland for mixed farming (72%), only 25% of crop farmers make use of farmland. Most of the farmers have opted to farm in backyard gardens. For female farmers, 47% of crop farmers and 51% of the mixed farmers farm in backyard gardens. This is approximately the same as male farmers. Approximately 73% of female farmers have made use of public land for crop farming and 25% for mixed farming purposes. Male farmers have mainly used public land for mixed farming (62%) and crop farming (26%). Most Female farmers farm their livestock on farmland whereas male farmers on public land.

Table 5.11: Female and male main farming location by farming type, 2023

Main Farming Location	Female Household heads – Farmers				Male Household heads – Farmers			
	Valid obs.	Crop (n = 186)	Livestock (n = 5)	Mixed (n = 165)	Valid obs.	Crop (n = 100)	Livestock (n = 7)	Mixed (n = 148)
Farmland	62	53.23	3.23	43.55	72	25.00	2.78	72.22
Backyard Garden	242	47.52	0.83	51.65	157	47.77	1.27	50.96
Public Land	52	73.08	1.92	25.00	26	26.92	11.54	61.54

Note: N = total number of observations excluding missing observations. n= represents the sub total. The % represents the share of individual farming activity from valid observations.

5.3.4 Land tenure arrangements and size

Table 5.12 below illustrates the distribution of land tenure arrangements among female and male crop farmers based on their landholding rights or access to land. The findings indicate that, for both genders (179 females and 123 males), the predominant method of land acquisition is through permission from traditional authorities. Additionally, a higher proportion of females (70%) reported privately owning land with title deeds for crop farming compared to males (53%). This could be due to the fact that in the crop farming industry, women dominate more than men leading them to acquire land titles at a higher rate compared to their male counterparts.

These results align with the 2011/2012 ARHE report, which documented that in the Eastern Cape, the sites managed by BRC in Keiskammahoek were restitution claimants however at the time of the survey, the land remained under the jurisdiction of traditional authorities.

Table 5.12: Land tenure arrangement among crop farmers; by land holding rights/basis for land access, 2023

Tenure Arrangement	Share (%) of female crop farmers				Share (%) of Male crop farmers			
	Valid Obs. [N=356]	Crop (n = 186)	Livestock (n = 7)	Mixed (n = 163)	Valid Obs. [N=256]	Crop (n=100)	Livestock (n=9)	Mixed (n=147)
Privately owned with title deed	82	69.51	1.22	29.27	66	53.03	0.00	46.97
Traditional Authority PTO	179	39.11	0.00	60.89	123	33.33	0.81	65.85
Different land agreement	95	62.11	6.32	31.58	67	35.82	11.94	52.24

Note: N = total number of observations excluding missing observations. n= represents the sub total. The % represents the share of individual farming activity from valid observations.

Following a similar format to Table 5.12, Table 5.13 presents the distribution of land tenure arrangements among female and male farmers, focusing specifically on livestock farming rather than crop farming. It

provides insights into how landholding rights or access to land vary between genders within the context of livestock farming. In line with the previous findings, both genders predominantly acquire land through permission from traditional authorities. However, in the context of livestock farming, a notable observation emerges: a higher proportion of males (31%) are likely to possess privately owned title deeds compared to females (27%). This suggests a slight gender disparity in land ownership within the livestock farming sector.

Table 5.13: Land Tenure arrangement among Livestock Farmers and Land Holding Rights/Basis for Land Access, 2023

Land Tenure	Share (%) of Female Livestock farmers				Share (%) of male Livestock farmers			
	Valid Obs. [N=231]	Crop (n = 2)	Livestock (n = 39)	Mixed (n = 32)	Valid Obs. [N=288]	Crop (n = 2)	Livestock (n = 142)	Mixed (n = 144)
Privately owned title deed	23	3.03	27.27	69.70	42	2.38	30.95	66.67
Traditional Authority PTO	106	0.79	15.75	83.46	104	0.96	25.96	73.08
Different land agreement	32	0.00	54.93	45.07	142	0.00	71.83	28.17

Note: N = total number of observations excluding missing observations. n= represents the sub total. The % represents the share of individual farming activity from valid observations.

Table 5.14 summarises the average land size farmers used for the previous farming season. The land size is measured in hectares. Female farmers had an average of 2.13 hectares for crop farming whereas male farmers had 2.81. Livestock farmers made use of significantly more land than crop farmers. This is understandable, crop farming does not require large sections of land unless the farming is for commercial purposes. Livestock farmers make use of the land for grazing, as a result some land may be lying vacant and under-utilised. On average, female farmers made use of more than 150 hectares for their livestock farming. Male farmers utilised approximately 237 hectares of farmland.

Table 5.14: land size farmers used for farming in last farming seasons - 2023, by district

	Female Farmers (hectares)			Male Farmers (hectares)		
	Valid Obs.	Average	Median	Valid Obs.	Average	Median
Crop farming	339	2.13	0.50	244	2.81	0.68
Livestock farming (grazing)	224	151.12	0.50	284	236.83	1.00

Note: N = total number of observations excluding missing observations. n= represents the sub total.

5.3.5 Farming income

Previous tables have shown that Agrarian Households have multiple sources of income ranging from salaries/ wages, social grants and other incomes like remittances. Table 5.15 zooms into the farming activity of female and male crop and livestock farmers from agrarian households. Of the valid observations, female crop farmers earned an average income of almost R30 000 (R29 742). Male crop farming households earned R336 571, in other words male crop farming households' earnings are more than 10 times than that of female crop farming households. This may be a result of male farmers having a history of inheriting farming land that is arable. This also highlights the income inequality present among female and male crop farmers especially considering that there were more female crop farmers than male crop farmers.

Livestock farmers have higher household incomes due to the high value that is placed on their livestock. The valid observations of female livestock farming households earned on average R44 663. This was significantly lower than the male livestock farming household earnings which averaged R82 743. Male livestock farming households earn significantly more than female livestock farmers. Though the 2010/2011 AHRE report stated that households with low income were engaged in crop farming whereas those households with higher income levels owned more livestock, it did not address the gender inequality.

Table 5.15: Overall agrarian farming household income of crop and livestock farmers, 2023

	Female Farmer			Male Farmer		
	Valid Obs.	Average	Median	Valid Obs.	Average	Median
Crop Farming	45	29742.82	4383.00	20	336571.40	8662.50
Livestock Farming	40	44663.75	7950.00	94	82743.09	12475.00

Note: N = total number of observations excluding missing observations. Readers should be cautioned against drawing inferences from sample

Table 5.16 summarised the household income for mixed farmers of both female and male-headed households. Female farmers from mixed farming households earned on average R17 379 from their crops and R121 480 from livestock. Male farmers from mixed farming households earned on average and income of R123 179 from their crops and R84 526 from livestock. The table suggests that female farmers derive most of their income from livestock whereas male farmers derive most of their income from crops. Mixed farming income for males is larger than females where males earn R14 808. Evidently, it is more profitable to engage in mixed farming as income can be derived from both crop and livestock farming. The 2011/2012 ARHE report suggested that mixed farming methods was popular amongst both the low and the high-income households. Also, the report suggested that the higher the household income, the more likely households would engage in both farming activities (mixed farming).

Table 5.16: Overall agrarian farming household income of mixed farmers, 2023

	Female Farmer			Male Farmer		
	Valid Obs.	Average	Median	Valid Obs.	Average	Median
Crop Farming	48	17379.67	10680.00	55	123179.42	10680.00
Livestock Farming	43	121480.00	33500.00	72	84526.67	33500.00

Note: N = total number of observations excluding missing observations. Readers must be cautioned against drawing inferences beyond the sample.

5.3.6 Labour on farms

Table 5.17 presents the percentage of on-farm labour inputs for crop farmers to determine, on average, the number of workers who assisted with crop farming during the 2022/23 season. On-farm labour are self-employed farmers who have not hired any workers. Farm labour is family members who are working and assisting on the farm. Hired labour are workers who have been hired on permanent contracts. And day labour is short term labour who work for short periods of time. On average, both female and male crop farmers had about three self-employed workers as on-farm labour. Similarly, both females and males hired approximately two household members on average, who were farm labour. The farm labour share for both genders was almost equal, averaging around 90%. Regarding hired labour, female farmers hired two workers on average, while seven of the male crop farmers hired approximately four workers. The hired labour share was 75% for females and 73% for males. For day labourers on-farm, females hired five workers, and males hired 5 workers on average. The daily labourer on-farm share was 82% for females and 85% for males.

The results highlight that majority of crop farmers choose to use their own labour or utilise their family members. Understandably, some small holder farmers have low profit margins and cannot afford to have many workers. This would lead to high wage costs limiting money for other expenses for agricultural production. Crop farmers opt to employ daily labourers so that they do not have to commit to long term wages. More importantly, male farmers employ more external labour than women.

Table 5.17: On-farm labour inputs of crop farmers, 2023

Farm labour inputs	Female-Headed Crop Farmer			Male-Headed Crop Farmer		
	Valid Obs.	Average	Median	Valid Obs.	Average	Median
On-farm labour ^a	126	3.29	1.00	55	3.31	1.00
Farm labour ^b	89	1.97	1.00	40	1.73	1.00
Farm labour share (%)	89	90.19	100.00	40	90.71	100.00
Hired labour	15	2.00	2.00	7	3.86	4.00
Hired labour share (%)	15	75.11	100.00	7	72.86	66.67

Day labourer on-farm	42	5.00	1.00	16	5.38	3.00
Daily labourer on-farm share (%)	42	82.07	100.00	16	85.10	100.00

Note: N = total number of observations excluding missing observations. Readers should be cautioned against drawing inferences beyond the sample.

^a On-farm labour refers to self-employed farmers.

^b farm labour refers to family members employed on farm

Table 5.18 presents the percentage of on-farm labour inputs for livestock farmers to determine, on average, the number of workers who assisted with livestock farming during the 2022/23 season. Female-headed livestock farmers hired an average of one to two workers for on-farm labour, while male-headed livestock farmers hired an average of two workers. Regarding farm labour, on average both male and female farmers hired more than 1 worker. The share of farm labour was 95% for females and 89% for males. Regarding hired labour, both females and males hired an average of one worker. The share of hired labour was 83% for females and 87% for males. For daily labourers on-farm, females and males hired an average of between one and two workers. The share of daily labourers on-farm was 75% for females and 79% for males.

Table 5.18: On-farm labour inputs of livestock farmers, 2023

Farm labour inputs	Female-Headed Livestock Farmer			Male-Headed Livestock Farmer		
	Valid Obs.	Average	Median	Valid Obs.	Average	Median
On-farm labour	54	1.87	1.00	113	1.99	1.00
Farm labour	42	1.74	1.00	70	1.77	1.00
Farm labour share (%)	42	95.03	100.00	70	88.81	100.00
Hired labour	7	1.14	1.00	21	1.48	1.00
Hired labour share (%)	7	83.33	100.00	21	87.45	100.00
Day labourer on-farm	11	1.82	1.00	41	1.71	1.00
Daily labourer on-farm share (%)	11	75.05	100.00	41	79.19	100.00

Note: N = total number of observations excluding missing observations. Readers should be cautioned against drawing inferences from sample

Table 5.19 presents the percentage of on-farm labour inputs for mixed farmers to determine, on average, the number of workers who assisted with mixed farming during the 2022/23 season. Regarding on-farm labour, female mixed farmers hired an average of two workers, while male mixed farmers hired 4. workers. Both males and females hired an average of two workers for farm labour. The labour share for females in farming is 92%, and for males, it is 77%. Regarding hired labour, females hired an average of two workers, while males hired an average of three workers. The labour share for females in hired labour was approximately 76%, and for males, it was 66%. Regarding day labourers on farms, females hired an average

of three workers, while males hired an average of four workers. The share of daily labourers on farms for females was 72%, and for males, it was 75%.

Table 5.19: On-farm labour inputs of mixed farmers, 2023

Farm labour inputs	Female-Headed Mixed Farmer			Male-Headed Mixed Farmer		
	Valid Obs.	Average	Median	Valid Obs.	Average	Median
On-farm labour	130	2.88	2.00	120	4.24	2.50
Farm labour	106	2.25	2.00	88	2.25	1.00
Farm labour share (%)	106	91.61	100.00	88	76.76	100.00
Hired labour	14	2.14	1.00	30	3.30	2.00
Hired labour share (%)	14	75.96	83.33	30	65.56	63.33
Day labourer on-farm	31	3.39	1.00	44	4.82	2.00
Daily labourer on-farm share (%)	31	71.79	81.97	44	74.51	70.83

Note: N = total number of observations excluding missing observations. Total Number of On-Farm Workers. Readers should be cautioned against drawing inferences from sample

5.3.7 Input costs

Table 5.20 presents a summary of self-reported farm input costs for the 2023 agricultural season, categorised by gender (female and male) of farmers. Input costs include farm inputs such as seeds, fertilizer and pesticides, chicks, calves, and lamb (livestock farming), animal medicine and vaccines, fodder and other feedstocks, tools and equipment, and ploughing.

On average, female farmers spent R15269.21 on farm input costs, while male farmers spent R27646.55. For seeds, female farmers spent an average of R1168.88, while male farmers spent an average of R3532.59. Regarding fertiliser and pesticides, female farmers spent an average of R5592.51, while male farmers spent an average of R14307.47. For livestock farming (chicks, calves, and lambs), female farmers spent an average of R6730.22, while male farmers spent an average of R26127.60. Female farmers spent an average of R2570.53 for animal medicine and vaccines, while male farmers spent an average of R3131.77. Regarding fodder and other feedstocks, female farmers spent an average of R22942.74, while male farmers spent an average of R10517.61. On average, female farmers spent R2405.62 on tools and equipment, while males spent R6174.66. As for ploughing, female farmers spent an average of R4785.48, while male farmers spent an average of R8149.39. The data indicates that female farmers spent slightly less on average than their male counterparts for most farm input costs, except for livestock farming and animal medicine and vaccines.

Table 5.20: Self-reported farm input costs in 2023 agricultural season, 2023

	Female Farmers			Male Farmers		
	Valid Obs.	Average	Median	Valid Obs.	Average	Median
Farm Input costs	363	15269.21	1000.00	359	27646.55	4200.00
Seeds	258	1168.88	215.00	191	3532.59	300.00
Fertilizer & pesticides	89	5592.51	749.00	79	14307.47	1200.00
Chicks, calves & lamb	59	6730.22	2000.00	83	26127.60	5800.00
Animal medicine	130	2570.53	530.00	233	3131.77	1000.00
Fodder	121	22942.74	1200.00	205	10517.61	3000.00
Equipment	100	2405.62	500.00	100	6174.66	900.00
Ploughing	84	4785.48	800.00	49	8149.39	1400.00
Miscellaneous cost	19	9128.42	1300.00	19	2230.63	1500.00

Note: *N* = total number of observations excluding missing observations. Readers should be cautioned against drawing inferences from sample

5.3.8 Input supplier

Table 5.21 summarises the main input suppliers who supplied seedlings to male and female farmers. The main suppliers are private sector input supplier, government spheres, civil society and others. From the private sector input suppliers, female farmers received 72% of input for crops and 90% of input for mixed. Male farmers received 75% of input for crops and 90% for mixed. From government spheres, female farmers received 3% for crops and 4% for mixed, while male farmers received 6% for crops and 2% for mixed produce. From civil society and other sources, female farmers received 25% for crops and 6% for mixed, while male farmers received 19% for crops and 8% for mixed.

Table 5.21: Main input suppliers that farmers used (livestock farming), 2023

	Female Farmers (Share=%)			Male Farmers (Share=%)			
	Valid Obs. [N=293]	Crop (n=154)	Mixed (n=136)	Valid Obs. [N=218]	Crop (n=89)	Livestock (n=2)	Mixed (n=127)
Private sector input suppliers	237	72.08	90.44	182	75.28	50.00	89.76
Government spheres	10	3.25	3.68	9	5.62	50.00	2.36
Civil society and others	46	24.68	5.88	27	19.10	0.00	7.87

Note: *N* = total number of observations excluding missing observations. Readers should be cautioned against drawing inferences from sample

Table 5.22 summarises the main input suppliers who supplied pesticides to male and female farmers. The main suppliers are private sector input suppliers, government spheres, civil society and others. Female farmers received 63% of pesticides for crops and 84% of mixed from private sector input supplier. Male farmers, on the other hand, received 68% of pesticides for crops and 86% for mixed. From the government spheres, female farmers received 8% pesticides for crops and 7% for mixed. Male farmers received 5% pesticides for crops and 7% for mixed. Civil society and other sources provided 29% of pesticides for crops and 9% for mixed to female farmers, while male farmers received 27% of pesticides for crops and 7% for mixed.

Table 5.22: main input suppliers that farmers used [farm input=pesticides, etc., 2023

	Female Farmer			Male Farmer			
	Valid Obs. [N=117]	Crop	Mixed	Valid Obs. [N=101]	Crop	Mixed	
Privates sector input suppliers	82	62.50	83.72	79	68.18	85.96	
Government spheres	9	8.33	6.98	6	4.55	7.02	
Civil society and others	26	29.17	9.30	16	27.27	7.02	

Note: N = total number of observations excluding missing observations. Readers should be cautioned against drawing inferences from sample

The table provided below (Table 5.23) illustrates the main input suppliers utilised by farmers for chicks, calves and lamb etc., categorised by gender. These suppliers cover private sector input suppliers, government entities, NGOs/Civil Society Organisations (CSOs) and others. The results reveal that 66 female farmers and 95 male farmers acknowledged using these input suppliers. The majority of respondents engaged in mixed farming, with 42 females and 47 males indicating such practices. Furthermore, a significant proportion of both female (90%) and male (96%) farmers in the mixed farming category identified private sector input supplier as their primary input suppliers. In contrast, only a minority of respondents reported using input supplies exclusively for crop farming, with one female and two males falling into this category. Interestingly, all of these respondents relied on private sector supplier as their main input supplier.

Table 5.23: Main input suppliers that farmers used, 2023

Farming input suppliers	Female Farmers			Male Farmers		
	Valid Obs. [N=66]	Livestock (n=23)	Mixed (n=42)	Valid Obs. [N=95]	Livestock (n=46)	Mixed (n=47)

Privates sector input suppliers	57	78.26	90.48	80	71.74	95.74
Civil society and others	8	17.39	9.52	14	26.09	4.26

Note: N = total number of observations excluding missing observations. Government sphere responses were too few to take into account (only 1 response). Farm inputs include chicks, calves and lamb, etc. Readers should be cautioned against drawing inferences from sample

The table provided below (Table 5.24) illustrates the input suppliers used by farmers engaged in both livestock and mixed farming for acquiring animal medication and vaccines, categorised by gender. According to the table, 137 females and 246 males confirmed using animal medication and vaccines as inputs for their farming activities. Notably, the majority of female farmers, both in mixed farming (94%) and livestock farming (90%), reported obtaining their animal medication and vaccines from private sector input suppliers. Similarly, a significant portion of male farmers, comprising 92% in mixed farming and 90% solely engaged in livestock farming, also relied on private sector input suppliers for these inputs.

It is worth mentioning that a relatively small number of both females (1) and males (8) reported receiving their animal medication and vaccines from civil society organisations. This could be attributed to budget constraints limiting the capacity of civil society organisations to supply a larger number of farmers, resulting in some farmers having to purchase these inputs independently.

Table 5.24: Main input suppliers that farmers used for animal medication, vaccines etc., 2023

Farming input suppliers	Female Farmers			Male farmers		
	Valid Obs. [N=137]	Livestock (n=49)	Mixed (n=87)	Valid Obs. [N=246]	Livestock (n=129)	Mixed (n=116)
Privates sector input supplier	127	89.80	94.25	224	89.92	92.24
Government spheres	9	10.20	4.60	14	6.20	5.17

Note: N = total number of observations excluding missing observations. Civil society responses were very low (1). Readers should be cautioned against drawing inferences from sample

Table 5.25 shows the main input suppliers’ livestock and mixed farmers use for animal feed and fodder by gender. Like the table above the suppliers include private sector input suppliers, government spheres and civil society organisations. The results reveal that 124 females and 205 males have confirmed their use of feed and fodder for their livestock. Among females, many farmers who are engaged in mixed farming (74) reported to be using these inputs, while a substantial portion of male livestock farmers (119) also reported their reliance on feed and fodder. Like the results above, both male and female farmers engaged in either livestock or mixed farming predominantly source their feed and fodder from the private sector. The results

also reveal a notable difference: a smaller proportion of female (4) and male (6) farmers acquire feed and fodder from governmental sources compared to those relying on civil society organisations. This thus raises questions about the efficacy and accessibility of government-supported initiatives in providing agricultural inputs.

Table 5.25: Main input suppliers that farmers used [farm input=animal feed, fodder, etc., 2023

	Female Farmers (Share=%)			Male Farmers (Share=%)		
	Valid Obs. [N=124]	Livestock (n=50)	Mixed (n=74)	Valid Obs. [N=205]	Livestock (n=119)	Mixed (n=84)
Privates sector input supplier	114	88.00	94.59	192	96.64	89.29
Government spheres	4	8.00	0.00	6	2.52	3.57
Civil society and others	6	4.00	5.41	7	0.84	7.14

Note: N = total number of observations excluding missing observations. Readers should be cautioned against drawing inferences from sample

The table below (Table 5.26) presents self-reported farming input costs for crop farmers during the 2023 agricultural season, categorised by gender. These inputs include seedlings, fertilizers, animal medicine, feeding and fodder, equipment, and ploughing. Remarkably, female farming costs averaged at R5 408.16 and R 16 095 for males. More to that, on average males allocated a higher expenditure towards farming inputs than females. Conversely, females reported a higher average spending on fertilizers, amounting to R 5,885. Interestingly, females indicated lower spending on seedlings, averaging R 1,146, while males reported lesser expenditure on feeding and fodder, averaging R 1,350 while none of the female participants reported incurring costs in this category.

Table 5.26: self-reported farm input costs in 2023 agricultural season, crop farmers.

	Female-Headed Households			Male-Headed Households		
	Valid Obs.	Average	Median	Valid Obs.	Average	Median
Farm Input costs	144	5408.16	500.00	78	16095.05	350.00
Seeds	125	1145.82	200.00	68	3268.09	200.00
Fertilizer & pesticides	46	5885.26	1000.00	27	13044.30	700.00
Equipment	53	1738.09	350.00	21	15158.57	930.00
Ploughing	42	2377.86	550.00	11	7468.18	2400.00
Miscellaneous cost	8	16910.00	1500.00	4	2793.75	1550.00

Note: Some inputs are excluded namely livestock inputs (animal medicine, fodder and chicks calves etc.). Readers should be cautioned against drawing inferences from sample

Similarly, to the preceding table, Table 5.27 below presents the self-reported farm input costs incurred by farmers during the 2023 agricultural season, categorised by gender. This table specifically outlines the input

costs associated with livestock farming, including chicks, calves, animal medicine, and equipment. Among these inputs, farming equipment was the most frequently reported cost, with 60 females and 136 males documenting expenditures. Interestingly, for females, farming equipment constituted the highest input cost on average, amounting to R 18,913, whereas males reported the highest expenditure on chicks and calves, averaging R 31,464.03. A smaller subset of farmers (11 females and 30 males) reported equipment costs, with males indicating this as their lowest expenditure (averaging R 2,853.27). Conversely, females reported animal medicine as their lowest input cost (averaging R 2,967).

Table 5.27: self-reported farm input costs in the 2023 agriculture season, livestock farmers, 2023

	Female-Headed Households			Male-Headed Households		
	Valid Obs.	Average	Median	Valid Obs.	Average	Median
Farm Input costs	60	18913.75	5800.00	136	23929.84	9480.00
Chicks, calves & lamb	18	8903.61	3387.50	34	31464.03	6750.00
Animal medicine	46	2967.33	1000.00	121	3244.07	1200.00
Fodder	47	12614.77	2500.00	119	8964.10	3500.00
Equipment	11	3816.36	1935.00	30	2853.27	825.00
Miscellaneous cost	5	5620.00	7200.00	7	2133.14	1500.00

Note: N = total number of observations excluding missing observations. Some input costs observations were very small (less than 5). Readers should be cautioned against drawing inferences from sample

The table below presents the self-reported input costs for the 2023 agricultural season among farmers engaged in both crop and livestock farming. A total of 159 females provided data on farming input costs, representing the largest cohort among both females and males (145). Male farmers reported an average cost of R37,346 for their farming input costs whereas female reported R22 824.69 which was less than male farmer's expenditure. In addition, females reported feeding and fodder as their primary expenditure, diverging from their male counterparts. Despite seedlings being the second most frequently reported cost among females, it represented their lowest expenditure on average, totaling R1,198 for 2023. Conversely, male farmers cited animal medication as their least costly input on average for the same period, amounting to R3,028.

Table 5.28: Self-reported farm input costs in the 2023 agricultural season, mixed farmers. 2023

	Female-Headed			Male-Headed		
	Valid Obs.	Average	Median	Valid Obs.	Average	Median
Farm Input costs	159	22824.69	1085.00	145	37346.49	6050.00
Seeds	130	1197.65	215.00	122	3706.93	375.00
Fertilizer & pesticides	41	5519.78	600.00	52	14963.35	1250.00
Chicks, calves & lamb	40	5916.70	1550.00	47	23352.96	5000.00

Animal medicine	83	2345.45	375.00	111	3027.66	800.00
Fodder	74	29502.41	560.00	84	12936.70	2925.00
Equipment	36	2957.31	500.00	49	4357.92	1000.00
Ploughing	39	7595.13	1000.00	37	8539.73	1400.00
Miscellaneous cost	6	1676.67	540.00	8	2034.38	1550.00

Note: N = total number of observations excluding missing observations. Readers should be cautioned against drawing inferences from sample

Table 5.29 below summarises the average consumption of by farmers in a year. The livestock was categorised as cattle, small livestock poultry, grain, vegetables and fruit. The largest consumption by female farmers was of grains (792 units), vegetables (629) and fruits (405). This consumption pattern is similar for female farmers as well with the main consumption being grains, followed by vegetables and fruit. More livestock was consumed by male farmers than female farmers. The 2011 study showed that 50% of the households produced crops and that production was mainly for household use. Poorer households opted to produce crops hence there are such large volumes of crops amongst farmers.

Table 5.29: Total number of self-reported consumption of all farmers, 2023

	Female Farmers			Male Farmers		
	Valid Obs.	Average	Median	Valid Obs.	Average	Median
Cattle	54	2.35	1.00	43	1.93	1.00
Small Livestock	89	2.13	1.00	49	4.82	1.00
Poultry	87	7.26	5.00	41	13.29	5.00
Grain	102	792.03	75.00	45	438.04	60.00
Vegetables	209	629.05	40.00	125	281.50	30.00
Fruit	94	405.50	5.00	53	206.41	5.00

Note: N = total number of observations excluding missing observations. Readers should be cautioned not to draw inferences beyond the sample. This is the self-reported number of consumption of farmers

Figures 5.17 and 5.18 below describe the primary sources of drinking water among female and male livestock farmers. Male and female livestock farmers used both municipal tap water and rain harvest as their main source of water. Less than 11% of livestock farmers sourced their water from boreholes, dams or other natural sources. More than two-thirds of mixed livestock farmers had rain harvest as their primary source of water. Male crop farmers (45%) made use of municipal tap water while female crop farmers (50%) made use of rain harvest. More than 60% of female mixed crop farmers had their primary water source as municipal tap water and 54% of male mixed crop farmers sourced it from rain harvest.

The 2012 ARHE report reflects on water usage through the lens of production elements. The report highlights the main way in which farmers get water for their agricultural outputs. Most of the participants in the 2012 study accessed water through natural sources such as rivers, streams and dams. This report indicates that more than three quarters of the respondents used these as their main water source for their livestock farming and more than two-thirds for their crop farming. There does appear to be a shift in the sources of water for agrarian households engaged in various farming activities. Farming households make use of a variety of water sources. Livestock farmers have mixed their sources to include both municipal water and rain harvest, whereas mixed farmers strongly prefer sourcing their water from natural sources like rain harvest. Crop farmers require large volumes of water for their production. It is precisely this reason that they have a diversity of water sources ranging from municipal water to borehole water, and finally rain harvest water.

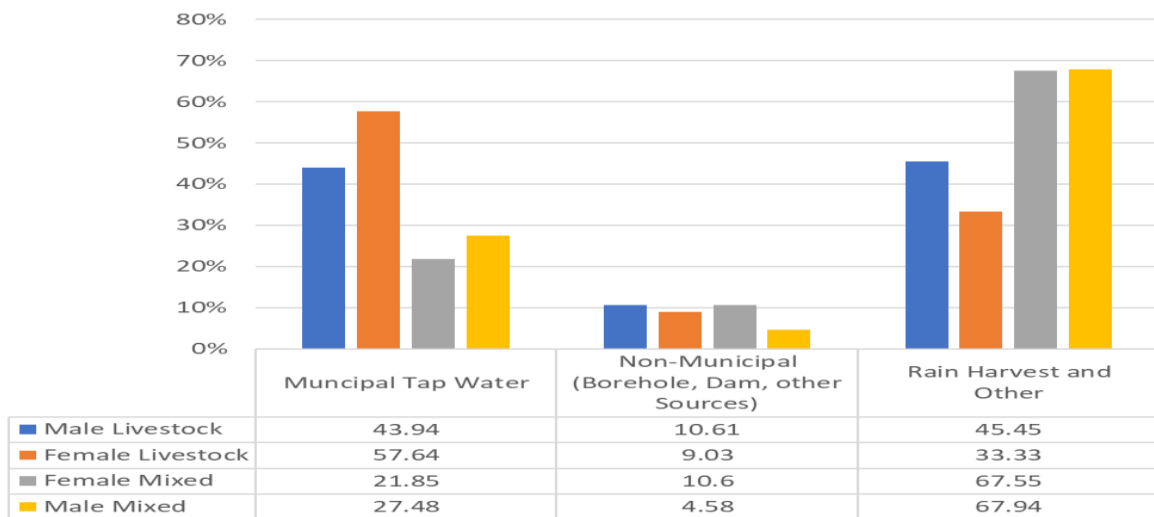


Figure 5.16: Main source of drinking water for livestock farmers, 2023 *Note: Self-reported source of drinking water for livestock farmers*

In crop farming, water is an essential agricultural input. This explains the diversity of water sources that crop farmers use as their source of water. Adverse weather conditions have also contributed to farmers needing to diversify the origin of their water sources, further discussed below. Livestock farmers have concentrated their water sources from municipal water and rainwater, as farming livestock does not require large volumes of water. Water is used for drinking purposes from the animals. Borehole water use is limited (below 11% of farmers use it as a source) as these types of water sources require some level of expertise and capital.

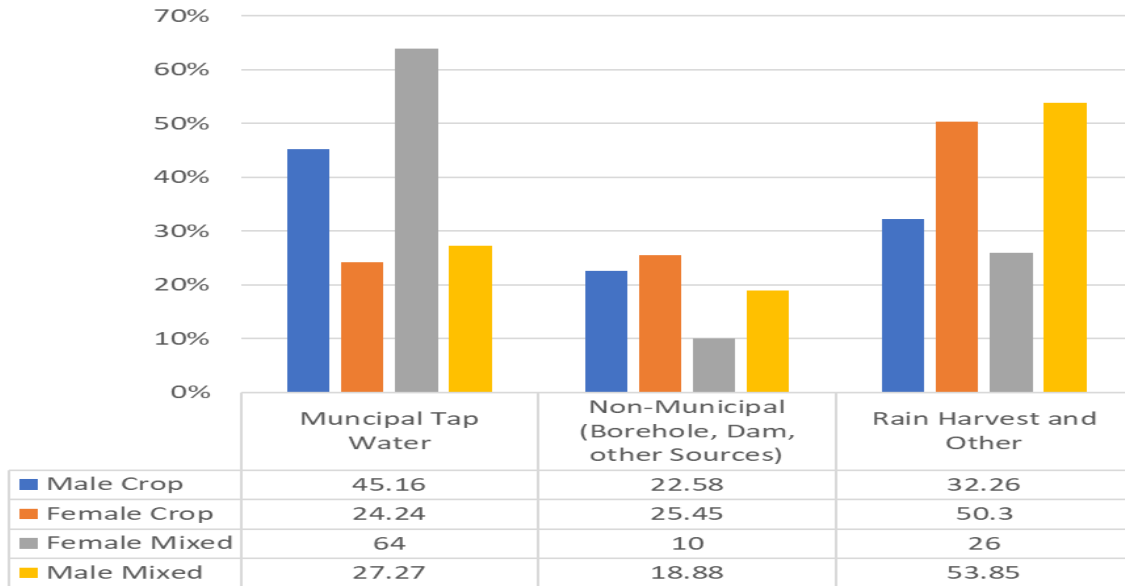


Figure 5.17: Main source of drinking water for crop farmers, 2023

Note: Self-reported source of drinking for crop farmers

5.3.9 Support farming activities

Figure 5.19 summaries the sentiments of agrarian households on government support in various farming activities. Approximately 37% of crop and livestock farmers had excellent training and extensive from the government and almost 40% for mixed farmers. A sizeable share of the farmers (crop and mixed) highlighted that their experience was fair. Roughly a quarter of mixed farmers had poor support from the government. Overall experience of government support has been very positive from farming households.

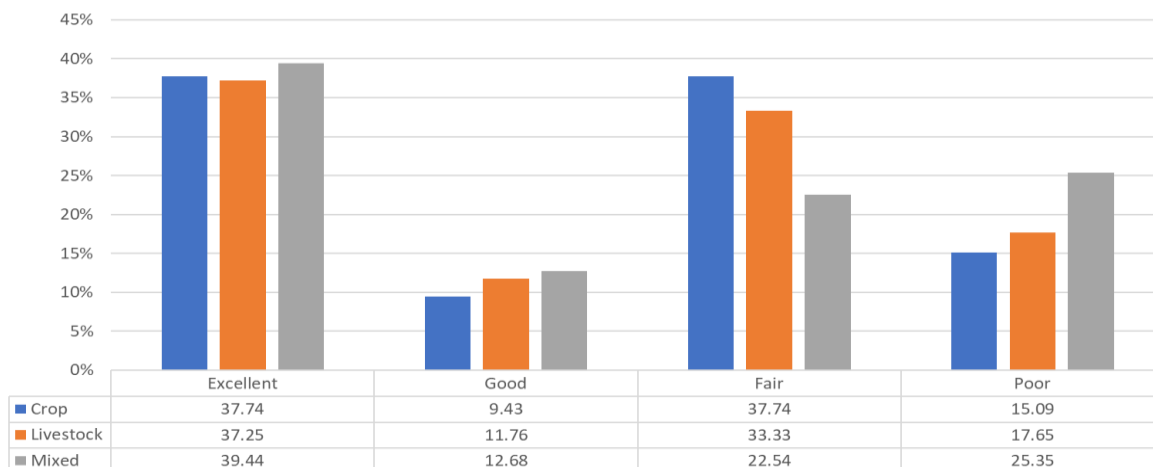


Figure 5.18: Experience with government training and extension advice for farmers, 2023

Note: Self-reported experience with government training and extension advice

Access to agricultural production support and market information is key in enhancing agricultural productivity. Figure 5.20 shows the mixed results of experiences in this regard. Almost 40% of crop and mixed farmers as well as a fifth of livestock farmers had an excellent experience with access to agricultural production, support and market information. Overall, the experience has been good with more than three-quarters indicating a positive experience. However, more than a third of livestock farmers and a fifth of mixed farmers had a poor experience with access to production, support and market information.

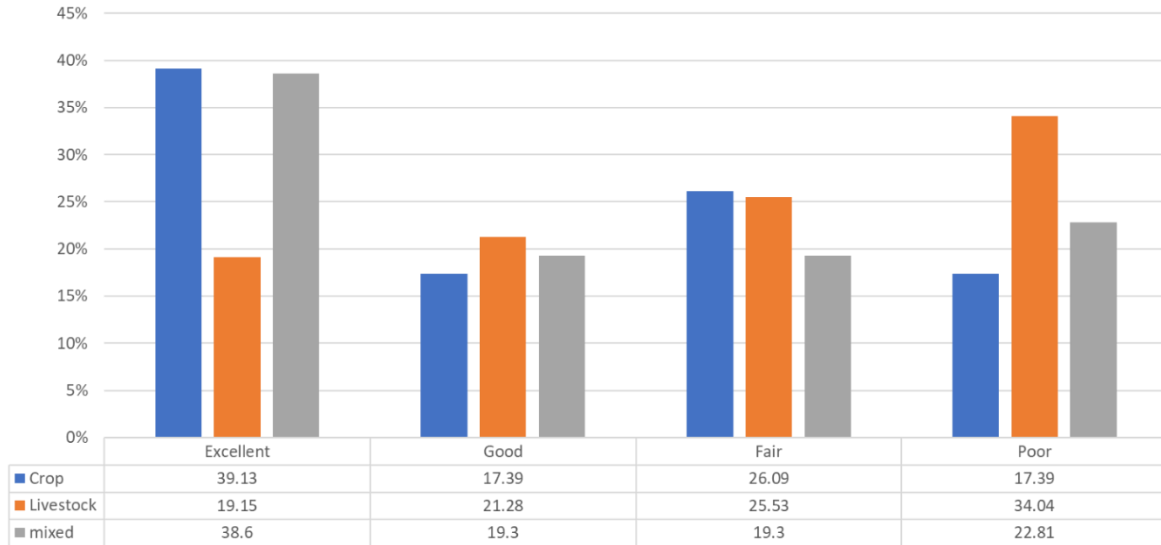


Figure 5.19: Experience with access to agricultural production, support and market information for farmers, 2023

Note: Self-reported experience with access to agricultural production

Experiences with land reform and various agricultural supports are main topics within rural communities. Figure 5.21 captures and presents these experiences. Crop farmers had very good experiences with support from government with a third indicating that they had an excellent experience. More than 20% of mixed farmers had similar sentiments. Both livestock and mixed farmer had good experiences. There is a small share of farmers (less than 5%) who experienced poor support from government.

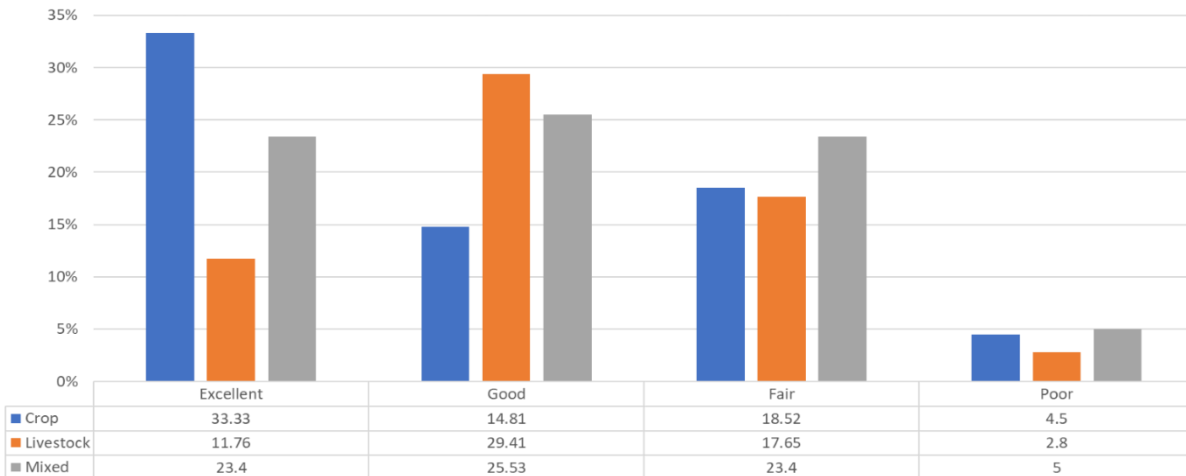


Figure 5.20: Experience with land reform and agricultural support grants, subsidies and loans from government, 2023

Note: Self-reported experience with land reform and agricultural support

NGO and CSO support are an important component of addressing some of the concerns of the agrarian households. Almost 60% of the crop farmers had an excellent experience with NGOs and CSO support while around 40% of livestock and mixed farmers indicated excellent experience with their support. More than a fifth of both livestock and mixed farmers had good or fair experience. Crop farmers had no poor experience with NGOs and CSO support whereas livestock and mixed farmers had 16% and 11% respectively. This indicates that crop farmers received a lot of support NGOs and CSOs. In some instances, the support could be there but insufficient to address the needs of the farmers.

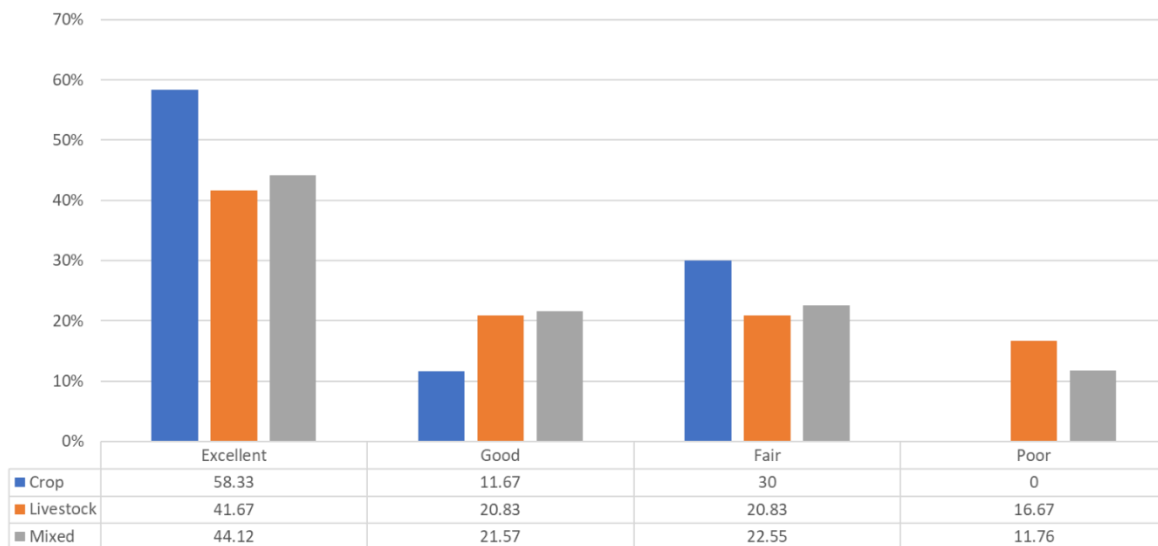


Figure 5.21: Experience with NGO and CSO support

Note: Self-reported experience with NGO and CSO support

The 2012 report highlighted that there are low levels of external support for agriculture but high levels for agricultural training. Almost half of the respondents received training. The type of training that was included was for mentoring, practical learning and once off short courses. These courses were important for integrating theory with practice. For support, less than 20% of the overall sample was visited by the government. There was less than 10% of production credit for farmers. Farm dwellers received the least agricultural support whereas other tenure types received better agricultural support. Most support for production credit was for those who are on communal land areas and land reform areas. Livestock and crop farmers have received the most training with those who produce more having received the most training.

5.3.10 Summary

The female farmers account for the largest share of farmers in the survey. The main purpose for farming varies in different AHs. For instance, female farmers farm for subsistence and male farmers for income. The main farming location of farmers was the backyard garden, followed by the farmland and public land. The dominant tenure arrangement is traditional authority for both crop and livestock farmers. Regarding farming incomes, livestock farmers received more income than crop farmers.

5.4 Farm workers and their employment conditions

An important objective of this report is to determine the changes that can be made to policies to improve the basic employment conditions of rural citizens. As such, this section deals with farm worker conditions. Another important aspect is to provide an understanding of the working conditions and living arrangements of those who work on farms for a wage. In this study's context, farm workers refer to individuals who are involved both directly and indirectly in farming activities and are compensated for this. The information presented below was solicited directly from household heads who indicated that working on a farm was their main livelihood option. The analysis is categorised according to the gender of the participant and the nature of the contractual agreement that the individual possesses with their employer, in this case, the farm owner.

5.4.1 Farm labour types of contracts

Table 5.30 below gives a description of the district level distribution of farm workers, with an additional focus on the contract types that individuals in these districts hold. The findings from this table indicate that Fezile Dabi had the most farm workers among the sampled districts, recording a total of 72 farm workers, this is followed by the Cape Winelands district, with 48 farm workers. Sarah Baartman and Sedibeng recorded the least number of farm workers. Several factors may influence the low number of farm workers

in these regions. For instance, Sarah Baartman is located in the Eastern Cape province where socio-economic factors such as high unemployment rates and increased levels of migration persist. These may be some of the reasons behind the low numbers of farm workers recorded in this region. In respect to Sedibeng, this district is located in the Gauteng province, which is considered to be the economic hub of South Africa. Therefore, there is often a preference towards more industrial and higher paying jobs as opposed to working on farms.

In Table 5.30 job contracts are divided into non-permanent and permanent contracts. Non-permanent contracts include seasonal and temporary workers and also those who are operating without any formal work contracts. The data in the table shows that the majority of the farm workers interviewed are holders of non-permanent contracts. Specifically, 94% of the surveyed farm workers have non-permanent contracts and only 6% of them have permanent contracts. This distribution is also prevalent in the respective districts with the majority of the farm workers in all the sampled districts having non-permanent contracts compared to permanent contracts. Non-permanent contracts offer no security for the farm workers but are useful to the employer. In these types of contracts, the employer determines the price level which at times is below the minimum wage. Also, employers are able to dispose of workers when it is convenient for them to do so. In the absence of permanent contracts, workers will have no sense of security or ability to plan for their future.

When comparing the results of the 2012 Agrarian Household Economy against the 2023 report, the 2012 report collected data from 881 farm workers in just Rawsonville and Hessequa districts, while the 2023 study collected data from 337 farm workers across 12 districts in South Africa. A notable difference can be established in the sample size of farm workers in the two studies, with the 2011/2012 survey having more than double the sample size of the current survey. Additionally, the baseline survey had a higher share of farm workers concentrated in the Western Cape which skewed the results.

Table 5.30: Share (%) of the district distribution of farm workers by contract type, 2023

District municipality	Valid obs. [N = 337]	Job contract type	
		Non-permanent (n = 317)	Permanent (n = 20)
Amajuba	20	80.00	20.00
Amathole	10	60.00	40.00
Bojanala	15	100.00	0.00
Cape Winelands	48	97.92	2.08
Ehlanzeni	10	100.00	0.00
Fezile Dabi	72	98.61	1.39
Namakwa	46	91.30	8.70

Overberg	25	96.00	4.00
Sarah Baartman	3	100.00	0.00
Sedibeng	3	100.00	0.00
Uthukela	41	87.80	12.20
Vhembe	44	100.00	0.00

Note: The valid observations of farm workers represent 25% of the entire sample. This makes it difficult to draw inferences. Readers should be cautioned against drawing inferences from sample.

Table 5.31 below describes the distribution of the nature of employment contracts of farm workers by gender. According to this table, 40% (133) of the interviewed farm workers were females and 60% (204) were males. As mentioned in the discussion above, the majority of the interviewed farm workers are employed under non-permanent contracts. This distribution still stands in respect of gender dynamics. Both female and male farm workers mostly hold non-permanent contracts. Specifically, 96% of female farm workers and 93% of males have non-permanent contracts in the sample of this study.

The 2011/2012 study recorded that 54% of the farm workers were women and 46% of the farm workers were men. Additionally, the 2011/2012 report also reported that 78% of the interviewees were permanently employed with the remainder having non-permanent contracts. In addition, there has been a huge shift in the preferred employment contracts of farm workers, with non-permanent contracts dominating in the 2023 study. The 2023 study found that 94% of interviewed farm workers had non-permanent contract. It is important to note that the 2011/2012 study focused on two districts for farm workers while the 2023 study sampled a total of 12 districts. Regardless, these results were consistent with the 2012 Quarterly Labour Force Survey, and therefore deemed an accurate summary of more general experiences.

Table 5.31: The gender distribution of farm workers by job contract type, 2023

Job contract type	Valid obs. [N = 337]	Gender	
		Female (n = 133)	Male (n = 204)
Non-permanent	317	95.49	93.14
Permanent	20	4.51	6.86

Note:

5.4.2 Age distribution of farm labour

Figure 5.23 gives a description of the age categories of the farm workers who participated in the study. The age category is divided into youth, which comprises of individuals below 35 years, mid adults which includes individuals between the ages of 36 and 50 years, adults which are those between 51 and 60 years and lastly, pensioners which includes those who are above 60 years. The findings in this table indicate that most of the farm workers interviewed were between 36 and 50 years of age, specifically, 48% farm workers are within this age category, followed by those that are below the age of 35 (34%) farm workers. Thirty-

nine percent of the interviewed farm workers were females and 61% were males. The least amount of farm workers was found in the pensioners category, with only 14 farm workers. As mentioned above, non-permanent contracts dominate among farm workers in this study, this distribution can also be found in respect to the different age categories of the sampled farm workers.

Figure 5.22: Age distribution of farm workers by job contract type, 2023

5.4.3 Number of years of farm labour

Table 5.32 below describes the number of years in which the respondents have been engaged in farm work and the duration of their stay on a farm categorised by the type of employment contract that they hold and by the gender the respondents identify as. This table clearly shows that females with permanent job contracts have worked as farm workers for longer than those with non-permanent job contracts. Specifically, the average duration for females was approximately 16 years for those with permanent contracts and 12 years for those with non-permanent contracts. However, the opposite can be observed with regards to the average duration of farm work between holders of non-permanent and permanent job contracts amongst male farm workers. The table shows an equal distribution on the duration of farm work among men with non-permanent and permanent employment contracts. The average duration was found to be about 10 years on average for both types of contracts.

The average duration of work amongst female and male farm workers also shows that females have a much longer duration in farm work years than that of their male counterparts regardless of the type of job contract held. Although women have been engaged in farm work for longer than men (on average), they still have the lowest share of employment in this sector as compared to their male counterparts. In relation to the duration of on farm stay between female and male farm workers, those with permanent employment contracts have a longer average stay on farm as compared to those with non-permanent contracts in both genders.

Table 5.32: Duration (years) of farm work and on farm stay for both female and male household heads, 2023

Farm Duration (years)	Female-headed households				Male-headed households			
	Non-permanent		Permanent		Non-permanent		Permanent	
	Average	Median	Average	Median	Average	Median	Average	Median
Farm work years	12.09	8.00	15.67	14.50	10.02	6.50	9.71	7.50
On farm stay years	18.31	16.50	29.00	29.00	12.68	7.00	18.83	21.50

Note:

5.4.4 Dwelling Location

Table 5.33 below describes the share percentage of the dwelling or house location for both female and male-headed farm worker households according to the type of job contract that they hold. According to this table, on farm dwelling location refers to the respondents' household being within the bounds of a farm while off farm refers to locations that are not within a farm. This table shows that regardless of the type of job contract between both female and males, they both tend to live in residences that are off the farm. In addition, a very small difference can be seen in relation to the dwelling location between non-permanent and permanent job contract types. The results seen from this table may be due to the farm workers' inability to afford housing within the farm or on farm dwelling or house location may not be an option. Therefore, the preference for off farm accommodation could be driven by cheaper accommodation options elsewhere.

Table 5.33: Dwelling location of both female and male farm workers, 2023

Dwelling/House location	Job contract type -Female [N=133]		Job contract type – Male [N=204]	
	Non-permanent contract (n = 127)	Permanent contract (n = 6)	Non-permanent contract (n = 190)	Permanent contract (n = 14)
Off farm	59.84	50.00	72.63	78.57
On farm	40.16	50.00	27.37	21.43

Note: N represents total valid observations and n is subtotal of valid observations. Farm workers represent 25% of the total sample.

5.4.5 Wages and benefits

Table 5.34 below shows the frequency in which both female and male farm workers receive their salaries/wages, categorised by their gender and the type of employment contract they hold. Farm workers can either receive their salaries monthly, weekly or daily. The results from this table show that most of the respondents in this survey received their salaries and wages monthly. Specifically, 61% of female and 73% of male farm workers received their salaries/wages on a month-to-month basis in this survey while a low 2% of female and 3% of male farm workers received their salaries/wages on a daily basis.

Table 5.34: Share (%) of how frequently female and male farm workers receive their wages, 2023

Frequency of wages/salary	Female farm workers [N=133]		Male farm workers [N=204]	
	Non-permanent (n = 127)	Permanent (n = 6)	Non-permanent (n = 190)	Permanent (n = 14)
Monthly	59.84	83.33	72.63	71.43
Weekly	37.80	16.67	23.68	28.57

Note: N represents total valid observations and n subtotal observations. Frequency of wages daily was less than 10 observations (3 [2%] for males and 7 [3%] females).

Table 5.35 below shows the percentage share of the non-wage benefits that farm workers receive. These are categorised by the type of employment contract (non-permanent and permanent) and gender (female and male). The aim of this question was to establish the benefits the respondents receive as farm workers directly from their employer besides their wages/salary. This table demonstrates that majority of non-wage benefits are directed towards employees who have permanent job contracts than those who have non-permanent jobs contracts regardless of their gender. This is in line with the common labour laws present in South Africa where the most employee benefits are directed towards individuals with permanent contracts.

In addition, one can deduce that work clothing and food to take home are two of the most common non-wage benefits that both female and male permanent contract holding farm workers receive (67% and 67% for females and 71% and 43% for males respectively). In contrast to this, farm workers who have non-permanent contracts, regardless of their gender received the most non-wage benefits related to housing within the farm (35% and 48%), miscellaneous benefits (10% for both) as compared to their permanent contract holding counterparts.

Table 5.35: Share (%) of non-wage benefits that female and male farm worker received, 2023

Non-Wage Benefit Type	Yes/No Response	Female farm workers [N=133]			Male farm workers [N=204]		
		Valid Obs.	Non-Permanent Contract	Permanent Contract	Valid Obs.	Non-Permanent Contract	Permanent Contract
Work Clothing	Yes (%)	63	46.46	66.67	124	60.00	71.43
	No (%)	70	53.54	33.33	80	40.00	28.57
On-farm housing	Yes (%)	46	34.65	33.33	94	47.89	21.43
	No (%)	87	65.35	66.67	110	52.11	78.57
Food to take home	Yes (%)	36	25.20	66.67	69	33.16	42.86
	No (%)	97	74.80	33.33	135	66.84	57.14
Food at work	Yes (%)	19	13.39	33.33	47	23.16	21.43
	No (%)	114	86.61	66.67	157	76.84	78.57
Land for farming	Yes (%)	19	14.17	16.67	48	24.21	14.29
	No (%)	114	85.83	83.33	156	75.79	85.71
Miscellaneous benefits	Yes (%)	13	10.24	0.00	20	10.00	7.14
	No (%)	120	89.76	100.00	184	90.00	92.86

Table 5.36 below describes the accommodation payment arrangements for farm workers who reside on a farm. This is categorised by gender and the type of employment contract that the respondent holds. Farm workers can either receive housing for free or have alternative payment arrangements in place. This table

shows that there are more male farm workers - 110 (72%) - who reside on farms and receive housing for free than females at 48 (65%). The same can be seen for farm workers who have alternative payment arrangements for their on-farm living, with 43 (28%) male farm workers and 26 (35%) female farm workers.

Additionally, according to the table below, it is more common for farm workers to receive housing for free than it is for them to pay for this, regardless of their gender. Lastly, those with non-permanent contracts receive housing for free more than those with permanent contracts irrespective of their gender (67% for female farm workers and 72% for male farm workers).

Table 5.36: Share (%) of housing payment arrangement for on farm living for farm workers, 2023

Payment arrangements	Female farm workers			Male farm workers		
	Valid obs. [N = 74]	Non-Permanent Contract (n = 72)	Permanent Contract (n = 2)	Valid obs. [N = 153]	Non-Permanent Contract (n = 147)	Permanent Contract (n = 6)
Receives housing for free	48	66.67	0.00	110	72.11	66.67
Other payment arrangements	26	33.33	100.00	43	27.89	33.33

Note:

Table 5.38 below demonstrates farm workers' experiences in relation to the implementation of the minimum wages policy, it illustrates the direct wage changes that occurred as a result of the minimum wage policy. The aim of the table is to show whether farm workers received their rightful wage increases or not, as the policy mandates. This table shows that the majority of the farm workers interviewed did not receive any wage increases due to this policy. Precisely, 65% (85) of female and 59% (121) of male farm workers indicated that they did not receive any wage increases because of the implementation of this policy.

Table 5.37: Share (%) of the effects of the minimum wage policy on farm workers in relation to mandatory wage increases, 2023

Minimum wage policy experiences	Female farm workers			Male farm workers		
	Valid obs.	Non-Permanent Contract (n = 125)	Permanent Contract (n = 6)	Valid obs.	Non-Permanent Contract (n = 190)	Permanent Contract (n = 14)
Wage increases	46	35.20	33.33	83	41.58	28.57
No wage increases	85	64.80	66.67	121	58.42	71.43

Note:

Similar to Table 5.38 above, Table 5.39 below describes the minimum wage policy experiences of farm workers in relation to their labour rights. These tables aim to evaluate whether their labour rights were impeded or not. This is categorised according to their job contract and gender. According to this table,

experiences of both female and male farm workers differ. With regards to female farm workers, an even distribution of minimum wage policy experiences can be seen whereby, 51% (66) experienced a curtailment of their labour rights, while 49% (64) did not have their rights curtailed as a result of this policy. However, a large majority of 71% (144) male farm workers did not have their labour rights curtailed while only 29% (58) experienced an infringement on their labour rights.

In respect to the type of job contract, those with non-permanent contracts had their labour rights curtailed more than those with permanent contract regardless of their gender. However, the difference is not significant between the two contract types. Further research needs to be conducted in order to help identify the reasons as to why the minimum wage policies have not been implemented sufficiently for farm workers and what can be done to ensure that farm workers reap the rewards of the minimum wage policies.

Table 5.38: Share (%) of the effects of the minimum wage policy on farm workers in relation to labour rights

Minimum wage policy experiences	Female farm workers			Male farm workers		
	Valid obs.	Non-Permanent Contract (n = 124)	Permanent Contract (n = 6)	Valid obs.	Non-Permanent Contract (n = 188)	Permanent Contract (n = 14)
Curtailed labour rights	66	50.81	50.00	58	28.72	28.57
No labour rights curtailed	64	49.19	50.00	144	71.28	71.43

Note:

5.4.6 Evictions

Table 5.37 below gives a description of the eviction status of farm workers in the past 10 years from the date in which this study was conducted (2023). This table is categorised by gender and the nature of the contract that the respondent holds. From this table, it can be deduced that the majority of farm workers did not experience any evictions in the 10 years before this study was conducted. Specifically, 95% of female and 96% of male farm workers indicated that they did not experience any evictions during this period. The eviction status of farm workers was of interest in this study.

The 2011/2012 study indicated that from the sampled districts in the Western Cape and KwaZulu Natal, 13% of the respondents experienced a threat to evictions. However, in a positive turn of event only 5% of the female and male farm workers indicated that they had faced a threat to eviction in the 2023 study.

Table 5.39: Share (%) of farm worker evictions in the last 10 years, 2023

Eviction status	Female farm workers [N = 78]			Male farm workers [N = 134]		
	Valid obs.	Non-Permanent Contract (n = 75)	Permanent Contract (n = 3)	Valid obs.	Non-Permanent Contract (n = 126)	Permanent Contract (n = 8)
No evictions in the past 10 years	74	96.00	66.67	129	96.03	100.00

Note: Valid observations for those evicted in past 10 years is negligible (4 [4%] for females and 5 [4%] males)

5.4.7 Summary

This section provides a synopsis of the results presented on the employment conditions of farm workers. It is important to note that the survey results of farm workers were quite small and should not be used to draw inferences but highlight important insights on the employment conditions of farm workers. The results highlighted that farm worker permanent contracts have dropped significantly since the baseline survey in 2012. The baseline survey reported that approximately 78% of their farm workers were on permanent work contracts where the current survey found that less than 10% of the farm workers were on such contracts.

More than a third of workers are part of the youth category which is below the age of 35 years. The report also pointed to some workers receiving non-wage benefits. For instance, permanent workers were the largest recipients of non-wage benefits. Additionally, more than two-thirds of non-permanent farm workers received free housing. The introduction of minimum wage did not result in the wage increases for all farm workers. Also, the majority of female farm workers had indicated that their labour rights had been curtailed since the introduction of minimum wage legislation.

5.5 The effects of climate dynamics and Covid-19 on agrarian households

The baseline survey did not report on the effects of climate dynamics and Covid-19 on Agrarian households. However, noting the frequency of climate catastrophes it is important to understand how these climate dynamics have impacted farmers. With that said, climate change has been identified as one of the several factors that could negatively affect agricultural production, which would be compounded for vulnerable groups like the poor and women. This section assesses the impact of extreme climate events and how they affect the way in which agrarian households conduct their everyday lives. For this reason, this section will provide an overview of how often households sampled in this study have experienced extreme climatic events in the past five years, the mechanisms that they use to cope during these events and, if any, what are the barriers that have prevented some households from employing some coping mechanisms for negative extreme climatic events. Lastly, the negative effects of Covid-19 on agrarian households are also explored.

5.5.1 Extreme negative climate events

Table 5.40 to table 5.43 below provide a summary of how often agrarian rural households in the twelve sampled districts self-report having been experienced extreme negative climate events in the past five years (from 2017-2022). The respondents shared their experiences, which were classified into four categories based on the frequency of the event. The most frequent category is labelled as “intense”, which means that respondents have experienced the specific extreme climatic event more than five times in the previous five years. The next category is “rare”, which means respondents have experienced the climate condition between three and five times. The third category is “seldom”, which means respondents have experienced the climate event at least once or twice in the last five years. The last category is “never”, which means the respondents have never experienced extreme heat in the last five years.

Table 5.40 below provides an overview of how often the sampled households self-report having been exposed to increased temperatures in the last five years. According to this table, 91% of agrarian households in the Sarah Baartman district intensely experienced extreme heat in the past five years, this is followed by 76% households in the Namakwa district. The intense heat levels in these districts can be attributed to their geographical location, which makes them more susceptible to high temperatures. Interestingly, agrarian rural households in the Amathole (85%) district had rarely encountered extreme heat. This shows that although Sarah Baartman and Amathole are in the same province, survey participants report varying experiences in relation to extreme heat conditions in the last five years. Those in the Cape Winelands (67%) and Ehlanzeni (58%) districts had seldom experienced increased temperatures in the past five years.

Table 5.40: Agrarian household’s exposure to increased temperatures in last five years by districts (Share %), 2023

District Municipality	Valid observations [N = 909]	Frequency of event			
		Intense (n = 326)	Rare (n = 293)	Seldom (n = 192)	Never (n = 98)
Amajuba	55	18.18	49.09	23.64	9.09
Amathole	114	0.00	85.96	14.04	0.00
Bojanala	110	37.27	21.82	10.91	30.00
Cape Winelands	6	0.00	16.67	66.67	16.67
Ehlanzeni	106	6.60	28.30	57.55	7.55
Fezile Dabi	41	56.10	21.95	12.20	9.76
Namakwa	82	75.61	8.54	8.54	7.32
Overberg	77	24.68	31.17	28.57	15.58
Sarah Baartman	117	90.60	9.40	0.00	0.00
Sedibeng	54	33.33	31.48	20.37	14.81
Uthukela	70	27.14	42.86	28.57	1.43

Vhembe	77	27.27	19.48	27.27	25.97
--------	----	-------	-------	-------	-------

Note: This table outlines the respondents' self-reported exposure to extreme heat in the past 5 years according to the sampled districts. Readers should be cautioned against drawing inferences from sample.

Table 5.41 below shows how often agrarian households report having been exposed to drought in the last five years. According to this table, Sarah Baartman is the district who experienced drought the most intensively out of all the studied districts. Specifically, 92% of Sarah Baartman district respondents indicated that they experienced drought intensively. These results are directly in line with the findings in the table above, increased exposure to heat significantly contributes towards drought conditions. In contrast, 84% of the households in the Amathole district had rarely experienced drought. Fifty-seven percent of respondents in Ehlanzeni, 50% in Cape Winelands, and 36% in Uthukela seldomly experienced drought in the past five years. In the Sedibeng district, almost equal percentage of respondents reported exposure to intense and less intense drought levels.

Table 5.41: Agrarian household's exposure to drought in the last five years by district, 2023

District municipality	Valid observations [N = 907]	Frequency of event			
		Intense (n = 242)	Rare (n = 315)	Seldom (n = 194)	Never (n = 156)
Amajuba	55	9.09	54.55	16.36	20.00
Amathole	116	0.00	84.48	15.52	0.00
Bojanala	108	22.22	25.00	11.11	41.67
Cape Winelands	6	16.67	16.67	50.00	16.67
Ehlanzeni	106	4.72	27.36	56.60	11.32
Fezile Dabi	40	5.00	35.00	25.00	35.00
Namakwa	81	35.80	33.33	19.75	11.11
Overberg	77	41.56	25.97	12.99	19.48
Sarah Baartman	117	92.31	7.69	0.00	0.00
Sedibeng	54	22.22	25.93	18.52	33.33
Uthukela	70	15.71	44.29	35.71	4.29
Vhembe	77	16.88	19.48	27.27	36.36

Note: This table outlines the respondents' self-reported exposure to drought in the past 5 years according to the sampled districts. Readers should be cautioned against drawing inferences from sample

Table 5.42 below describes agrarian household's self-reported exposure to floods and heavy rain in the last five years. From this table, the highest share of exposure to floods and heavy rain was found in the Cape Winelands district, with 50% of agrarian households in this district indicating that they had been exposed to floods and heavy rain more than five times in the last five years. The Cape Winelands district is situated in a mountainous region which often has a direct influence on the frequent rainfall patterns in the region. The remainder of the districts reported less than 20% intense exposure to floods and heavy rain. The Amathole (29%), and Amajuba (24%) districts, are among the districts that rarely experienced flooding and

heavy rain. However, 81% of the agrarian households in Sedibeng reported to never experiencing floods and heavy rain in the last five years.

Table 5.42: Agrarian household's exposure to flooding and heavy rain in the last five years by district, 2023

District municipality	Valid observations [N = 897]	Frequency of event			
		Intense (n = 31)	Rare (n = 89)	Seldom (n = 302)	Never (n = 475)
Amajuba	55	7.27	23.64	41.82	27.27
Amathole	114	0.00	28.95	69.30	1.75
Bojanala	106	0.94	4.72	6.60	87.74
Cape Winelands	6	50.00	16.67	16.67	16.67
Ehlanzeni	104	0.96	5.77	59.62	33.65
Fezile Dabi	38	7.89	10.53	18.42	63.16
Namakwa	81	3.70	11.11	27.16	58.02
Overberg	78	14.10	11.54	15.38	58.97
Sarah Baartman	117	0.85	1.71	32.48	64.96
Sedibeng	53	1.89	3.77	13.21	81.13
Uthukela	69	2.90	4.35	42.03	50.72
Vhembe	76	1.32	2.63	19.74	76.32

Note: This table outlines the respondents' self-reported exposure to flooding and heavy rain in the past 5 years according to the sampled districts. Readers should be cautioned against drawing inferences from sample

Table 5.43 below describes agrarian household's self-reported exposure to changes in rainfall patterns in the last five years. Significant changes in rainfall patterns have been reported in the Sarah Baartman district, with 83% of respondents reporting intense changes in rainfall patterns over the past five years, this is followed by 75% households in the Cape Winelands and 40% of the households in Sedibeng. However, Ehlanzeni (63%), Uthukela (62%) and Amathole (51%) reported that they rarely experienced changes in rainfall patterns over the past five years. Bojanala (73%), Amajuba (53%), and Fezile Dabi (46%) reported never experiencing changes in rainfall patterns in the past five years. This indicates that the rainfall patterns were erratic and highly unpredictable.

Table 5.43: Agrarian household's exposure to radical change in rainfall patterns experiences in last five years, 2023

District municipality	Valid observations [N = 897]	Frequency of event			
		Intense (n = 217)	Rare (n = 270)	Seldom (n = 188)	Never (n = 858)
Amajuba	55	1.82	5.45	40.00	52.73
Amathole	115	0.87	50.43	47.83	0.87
Bojanala	69	13.04	5.80	8.70	72.46
Cape Winelands	4	75.00	25.00	0.00	0.00
Ehlanzeni	106	4.72	19.81	63.21	12.26
Fezile Dabi	37	29.73	13.51	10.81	45.95

Namakwa	82	12.20	35.37	41.46	10.98
Overberg	78	21.79	23.08	20.51	34.62
Sarah Baartman	117	82.91	13.68	3.42	0.00
Sedibeng	52	40.38	15.38	23.08	21.15
Uthukela	68	4.41	61.76	27.94	5.88
Vhembe	75	6.67	16.00	41.33	36.00

Note: This table outlines the respondents' self-reported experience of radical shifts in rainfall patterns in the past five years according to the sampled districts. Readers should be cautioned against drawing inferences from sample

5.5.2 Negative impacts of extreme climatic events

Table 5.44 presents the negative effects that female-headed and male-headed agrarian households self-report having faced due to extreme climatic events in the past five years. It shows the percentage of farmers, farm workers, and farm dwellers in both households who have encountered challenges such as crop failure, water shortage, food shortage, post-harvest losses, loss of income from produce, and livestock deaths. Respondents could select yes or no for each negative impact of climate change.

Farmers from female-headed and male-headed households report having negatively been affected by crop failure, with 72% females experiencing this compared to males at 53%. However, farm workers and farm dwellers in both types of households were mainly unaffected, with more than 97% of respondents stating that they did not experience crop failure. On the other hand, water shortage affected 69% of farmers from female-headed households compared to 54% of farmers from male-headed households. More than 98% of farm workers and farm dwellers did not experience any water shortages. Some respondents experienced food shortages in the past five years. More than half of the farmers from female-headed households and only 37% of farmers in male-headed households faced the shortage. Less than 2% of farm workers and farm dwellers reported experiencing food shortages in that period.

Regarding post-harvest losses, 47% of farmers from female-headed households, compared to 31% of male-headed households, reported experiencing them. However, farm workers and farm dwellers did not report any post-harvest losses. Both male and female farmers reported an equal produce income loss of 29%. Nonetheless, farm workers and farm dwellers did not experience any loss of income from produce. Farmers from female-headed households suffered 32% of livestock deaths, whereas male farmers experienced 45% of livestock deaths. Farm dwellers from female-headed households and farm workers from male-headed households reported 3% of the loss from livestock deaths.

Table 5.44: Share (%) of negative effects experienced by female and male agrarian households due to extreme climatic events in the last five years, 2023

		Female-headed households [N = 660]	Male-headed households [N = 637]
--	--	------------------------------------	----------------------------------

Negative impact of climate	Yes/No response	Farmers	Farm workers	Farm dwellers	Farmers	Farm workers	Farm dwellers
Crop failure	Yes (%)	71.69	1.50	2.25	53.16	2.94	0.00
	No (%)	28.31	98.50	97.75	46.84	97.06	100.00
Water shortage	Yes (%)	69.41	1.50	1.12	54.13	2.45	0.00
	No (%)	30.59	98.50	98.88	45.87	97.55	100.00
Food shortage	Yes (%)	53.65	0.00	1.12	36.41	1.96	0.00
	No (%)	46.35	99.25	96.63	63.59	98.04	100.00
Post-harvest losses	Yes	46.58	0.00	1.12	30.58	0.00	0.00
	No (%)	53.42	100.00	98.88	69.42	100.00	100.00
Produce income loss	Yes (%)	28.77	0.75	1.12	28.64	0.49	0.00
	No (%)	71.23	99.25	98.88	71.36	99.51	100.00
Livestock deaths	Yes (%)	31.96	0.75	3.37	44.90	3.43	0.00
	No (%)	68.04	99.25	96.63	55.10	96.57	100.00

Note: This table outlines the respondents' self-reported experience of negative effects of agrarian households due to extreme climate events in past 5 years. Readers should be cautioned against drawing inferences from sample

5.5.3 Mitigation strategies

Table 5.45 presents the share percentage of the adaptation strategies employed by agrarian households to their production practices to mitigate the effects of climate change. The four strategies considered include changing planting time, cultivating new crops, mixed cropping, and alternative irrigation systems. The respondents could indicate whether they employed specific mitigation strategies or if they did not. Most male and female farmers did not change planting time as an adaptation strategy, specifically, 56% of female farmers and 72% of male farmers reported that they did not do this. Farm workers and dwellers of both genders also largely reported not changing planting time as a strategy. Most sampled respondents also reported not cultivating new crops as an adaptation strategy (65% female and 76% male) similar to male and female farm workers and dwellers. Regarding mixed cropping, 67% of female farmers did not resort to it as an adaptation strategy, compared to 74% of male-headed households. More than 98% of male and female farm workers and dwellers did not use mixed cropping as an adaptation strategy either. Finally, both male and female farmers reported not switching to alternative irrigation systems almost equally (80% female and 79% male).

Table 5.45: Share percentage of the adaptation strategies employed by agrarian households due to climate change, 2023

Adaptation strategies	Yes/No response	Valid obs.	Female-headed households [N = 660]			Valid obs.	Male-headed households [N = 637]		
			Farmers	Farm workers	Farm dwellers		Farmers	Farm workers e	Farm dwellers
	Yes (%)	342	44.29	0.00	3.37	225	27.91	1.96	0.00

Change planting time	No (%)	318	55.71	100.00	96.63	412	72.09	98.04	100.00
Cultivating new crops	Yes (%)	156	35.39	0.00	1.12	102	24.27	0.98	0.00
	No (%)	504	64.61	100.00	98.88	535	75.73	99.02	100.00
Mixed cropping	Yes (%)	150	33.56	0.75	2.25	109	25.97	0.98	0.00
	No (%)	510	66.44	99.25	97.75	528	74.03	99.02	100.00
Alternative irrigation system	Yes	91	20.82	0.00	0.00	84	19.90	0.98	0.00
	No (%)	568	79.18	100.00	100.00	553	80.10	99.02	100.00

Note: This table outlines the respondents' self-reported share of adaptation strategies employed by agrarian households due to climate change. Readers should be cautioned against drawing inferences from sample

5.5.4 Barriers to implementing climate adaption strategies

Table 5.46 illustrates the share percentage of barriers faced by agrarian households in implementing climate adaptation strategies. The study identified three main barriers: lack of government support, lack of information, and no capital. Respondents could indicate whether or not the identified barriers applied to them. Lack of government support was found to be a significant barrier, with over 74% of male and female farmers reporting it as an obstacle in implementing climate adaptation strategies. However, more than 95% of farm workers and dwellers were not affected by the lack of government support. Lack of information was also reported as a barrier among farm workers, with 67% of female and 62% of male workers facing it. However, farm workers and dwellers did not face this issue, with over 85% reporting that they were unaffected by the lack of information. Not having enough capital was another significant barrier, with 74% of female farmers and 70% of male farmers reporting it. However, male and female farmers and dwellers did not encounter a lack of capital as a barrier. These findings indicate that lack of government support, lack of information, and no capital are significant barriers that need to be addressed to improve the implementation of climate adaptation strategies in agrarian households.

Table 5.46: Share percentage of the barriers experienced by agrarian households to climate adaptation strategies, 2023

Barriers to implementing climate adaptation	Yes/No response	Valid obs.	Female-headed households [N = 660]			Valid obs.	Male-headed households [N = 637]		
			Farmers	Farm workers	Farm dwellers		Farmers	Farm workers	Farm dwellers
Lack of government support	Yes (%)	341	76.71	1.50	3.37	317	74.03	5.39	4.76
	No (%)	319	23.29	98.50	96.63	320	25.97	94.61	95.24
Lack of information	Yes (%)	299	66.89	2.26	3.37	281	62.14	11.27	9.52
	No (%)	361	33.11	97.74	96.63	356	37.86	88.73	90.48
No capital	Yes (%)	111	73.74	2.26	3.37	155	69.66	3.43	4.76
	No (%)	549	26.26	97.74	96.63	482	30.34	96.57	95.24

Note: This table outlines the respondents' self-reported barriers experienced to climate adaptation strategies. Readers should be cautioned against drawing inferences from sample

5.5.5 Covid-19's impact

Table 5.47 below presents the share percentage of the impact Covid-19, and related restrictions had on agrarian households' farming activities. This table aimed to solicit information about their negative experiences from the Covid-19 pandemic from all categories of agrarian households (farmers, farm workers and farm dwellers). The negative effects were categorised into three areas, namely, rising cost of farming, loss of income due to lockdown, and loss of income due to reduced demand. The responses from this table indicate that female-headed agrarian households experienced the most negative effects of Covid-19 related restrictions as compared to male-headed agrarian households. It is only in relation to loss of income due to reduced demand where male-headed households had the largest share as compared to female-headed households. In addition, among the different agrarian households, farmers were the most affected by Covid-19 and related restrictions. This is mainly because the negative effects listed mostly affect agrarian households who receive income from their agricultural activities.

In relation to the rising cost of farming, 70% of female farmers and 65% of male farmers reported that the cost of their farming practices had risen during the restrictions imposed during the Covid-19 pandemic. Whereas less than 5% of farm workers and farm dwellers reported that they had experienced an increase in the cost of farming. This distribution holds, as the lockdown regulations during this time had major disruptions on the supply chains in this industry. The effect of this, among others, was an inevitable increase in the prices of farming goods and services.

During the Covid-19 pandemic, different stages to the lockdown regulations were put in place. Businesses and citizens were under strict lockdown, which had a negative impact on everyone. For instance, the restricting of movement impacted the normal operations of farmers. In relation to the agricultural sector, farmers were only allowed to resume their normal operations during alert level four of the lockdown stages. This meant that during the period from alert level five until level four, farmers could not operate, and this inherently resulted in a loss of income for a lot of farmers in South Africa. As a result, and from the findings of this study, the duration of the lockdown had a more significant impact on male farmers, with 42% reporting a loss of income compared to 33% of females. However, less than 10% of farm workers and dwellers reported a loss of income due to the lockdown.

Interestingly, most respondents did not report a loss of income due to reduced demand. Seventy-six percent of female and 64% of male farmers did not experience a loss of income due to reduced demand. Furthermore, farm workers and dwellers did not lose income due to reduced demand during the same period. The responses indicate that the negative impact of restrictions related to Covid-19 on agrarian households was mainly due to rising farming costs and loss of income due to the lockdown. While females reported a higher percentage in the rising cost of farming, males were slightly more affected by the loss of income due to the lockdown. Loss of income due to reduced demand had a minimal effect across the board.

Table 5.47: Share percentage of the effect of Covid-19 on agrarian households, 2023

Negative effects of Covid-19	Yes/No response	Valid obs.	Female-headed households [N = 660]			Valid obs.	Male-headed households [N = 637]		
			Farmers	Farm workers	Farm dwellers		Farmers	Farm workers	Farm dwellers
Rising cost of farming	Yes (%)	314	70.32	2.26	3.37	274	64.56	3.43	4.76
	No (%)	346	29.68	97.74	96.63	363	35.44	96.57	95.24
Loss of income due to lockdown	Yes (%)	155	32.65	8.27	1.12	192	41.75	9.80	0.00
	No (%)	505	67.35	91.73	98.88	445	58.25	90.20	100.00
Loss of income due to reduced demand	Yes (%)	111	24.43	2.26	1.12	155	35.92	3.43	0.00
	No (%)	549	75.57	97.74	98.88	482	64.08	96.57	100.00

Note: This table outlines the respondents' self-reported effects of covid-19 on agrarian households. Readers should be cautioned against drawing inferences from sample

5.5.6 Summary

This section reported on the effects of climate dynamics and Covid-19 on AH. The original survey did not report on any climate related impacts, nor did it address Covid-19, as this pandemic and its impact only started in 2019. On climate change, self-reported extreme heat and drought had the most negative impact on AHs. Survey participants did not note a radical shift in rainfall patterns in various districts. Looking at farming activity, female farmers were mostly affected by these extreme weather conditions which resulted in crop failure, water and food shortages in some instances. Evidently, there has been a poor implementation of mitigation and adaptation strategies by farmers. More work needs to be done in this area.

6. CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

This study sought to determine whether the living conditions of agrarian households have improved over the last decade (since the previous agrarian household survey). Changes in living conditions were measured against the results of the previous agrarian rural household economy report in 2012. The findings of that report highlighted the challenges of accessing land for production and securing tenure for agrarian households. In the 2023 study, rural households were willing and able to use land productively to improve their households however they require the necessary support. Women and youth are still excluded in economic activity and much effort is needed to reverse this worrying trend particularly in rural communities. Agricultural production has a huge role to play in addressing food sovereignty and job security. Job security requires policies that will focus on the employment conditions of rural citizens. Finally, it is imperative that the role of organisations is defined and accurately determined so that they play a larger role in advocating for the needs of the rural communities.

The results of the current comparative study show some slight progress in land access for agricultural production. Specifically, access to land for crop farming has increased from two hectares or less to between two and three hectares. Additionally, the findings indicate that backyard gardens are the main farming location for farmers, and traditional authority is the dominant tenure arrangement. The data indicates that private-sector cooperatives play a crucial role in supporting agrarian households. They are the primary source of most farming input supplies, including seedlings, pesticides, livestock inputs, medication, vaccines, animal feed, and fodder. This underscores the importance of these cooperatives in providing essential supplies and supporting the agricultural activities of rural households.

Most of the interviewed participants expressed a strong desire for more economic activity and income-generating opportunities. They believe significant livelihood improvements are possible with the proper support and development opportunities to enhance their farming and business skills. Creating employment opportunities through these initiatives could also effectively address the high levels of unemployment in rural communities. However, the current opportunities are not easily accessible to rural households far from towns. Limited critical resources threaten agrarian livelihoods, making it increasingly difficult for rural households to sustain their farming activities. One challenge mentioned is the tiresome process of obtaining a water license, which is crucial for farming. Resilience to climate shocks is also necessary and a matter of survival for these households. Initiatives such as food gardens and rainwater harvesting were suggested as

practical steps towards self-reliance and reducing dependence on municipal water and other external resources. This is crucial to improving their livelihoods and ensuring their long-term sustainability.

Women and youth face unique challenges in the agricultural sector. Women often face difficulties due to reproductive work and a lack of social and family support systems. They typically work with vegetables, while men are more involved in grain and livestock. Women are mostly farm workers, while more men own the land. Traditional gender roles in agrarian households influence their activities, with women engaging in “softer” tasks and men in “harder” and more intensive work. Another persistent challenge is the continued seasonal employment of women resulting in limited job security. In theory, policies prioritise the poor, youth, women, and people with disabilities, but their impact on rural lives is not significant. The younger generation is also seeking employment in non-agricultural sectors, as education levels remain low and unemployment rates are high, limiting job opportunities for youth.

The improvement of agrarian household living conditions can partly be attributed to their initiatives to enhance their lives. Participants emphasised the importance of collective action and financial resources for the success of rural agrarian households. They noted that land reform beneficiaries have recognised the ineffectiveness of waiting for state support and have taken positive steps to improve conditions. Additionally, there has been increased awareness about rights within these communities. Participants also highlighted their need to save money to supplement or contribute to government provisions.

Agriculture remains a crucial sector for two primary reasons: it acts as the primary driver of the rural economy and serves as a mechanism for achieving food sovereignty. Agriculture remains the key sector for generating employment opportunities in rural areas. These jobs are essential for alleviating poverty and generating income. It is imperative to channel more support, as ascertained from the needs of agricultural producers, towards those generating employment opportunities to ensure their continued contribution to economic growth. Furthermore, agriculture facilitates self-sufficient food production. Individuals with access to land are able to produce their own nutritious and culturally relevant food using environmentally sustainable methods. This underscores the necessity of enhancing the capacity of individuals and communities to achieve food security and self-reliance. It is important to support agrarian households by securing their access to land and providing education on sustainable agricultural practices.

South Africa boasts a comprehensive legislative framework designed to protect worker rights and establish minimum employment standards. While these policies, on paper, appear well-constructed and effectively address critical workplace issues, their implementation in rural areas remains a significant challenge. The

persistent use of non-permanent contracts, extending for over a decade in some cases, exposes rural workers to job insecurity and denies them access to benefits associated with permanent employment. The core of the challenge lies in a lack of adequate monitoring systems. The current governmental systems are inadequate in assessing the progress, challenges, and impact of these policies. This gap fosters an environment conducive to the continuation of unfair labour practices. Furthermore, the lack of monitoring underscores employers' non-compliance and resistance to implementing these policies, ultimately disregarding worker freedoms.

To bridge this gap between policy and practice, a multi-stakeholder approach is important to solve this crisis. Collaboration between trade unions, government agencies, the private sector, and civil society organisations is crucial in ensuring the swift and effective implementation of these policies. This collaborative effort should prioritise ensuring employer compliance and enforcing the operationalisation of these protections for agrarian households. Promoting inclusion is a key component of good policy creation.

The voices of agrarian communities, directly impacted by these policies, must be actively incorporated into policy development and review processes. This necessitates enhanced public participation and community mobilisation efforts within rural areas. Through active involvement, these communities can not only advocate for their specific needs but also identify areas where existing policies require review to better serve their interests.

Social movements play a critical role in development by fostering collective action and influencing policy. However, their effectiveness hinges on membership strength. In the context of agrarian communities, low membership numbers in unions and farming associations are concerning, particularly compared to the higher levels of participation seen in religious institutions. Trade unions and farming associations serve as significant organisations for rural populations. Unions empower workers by securing better working conditions and educating them about their rights and evolving labour laws. Farming associations, on the other hand, advocate for farmers' interests, mitigating obstacles to long-term food security. The lack of high membership in these organisations leaves agrarian communities vulnerable to exploitation and ill-equipped to address challenges independently.

To effectively champion their needs and contribute to a bottom-up development approach, agrarian communities need to be organised. High membership concentration within religious institutions presents a strategic opportunity for social movements to mobilise for increased union and association membership. Collaboration with community and religious leaders is key to reaching and recruiting potential members at

the grassroots level. These spaces can be utilised for educational campaigns, highlighting the benefits of union and association membership, such as improved working conditions, amplified voices, and the potential for positive change through collective action. Ground-level mobilisation efforts can further enhance community awareness of policies and individual rights. This empowers individuals to actively participate in policy formation processes, ensuring their voices are heard and their needs are addressed. By strengthening membership through targeted mobilisation strategies within religious institutions, social movements can empower agrarian communities to contribute meaningfully to their own development and advocate for positive change.

6.2 Recommendations

Table 6.1: Recommendations

The findings from the 2023 agrarian households offer the TA collective with an agenda for activism to help achieve the livelihood aspirations of household farmers, smallholder farm workers and other marginalised rural dwellers. The table below summarises this activist agenda in the form of broad recommendations linked to each study objective. A crucial next step is for TA affiliates to reflect on this overarching agenda for pro-poor agrarian activism and tailor each recommendation into action plans to guide day-to-day grassroots practice. The following recommendations are proposed in an attempt to address the identified issues and further enhance the livelihoods of agrarian rural households. The aim of the recommendations is to enhance access to resources and equitable agrarian restructuring, promote gender equality, and empower young people in agrarian rural households.

Research Objectives	Recommendations
To establish if and where there has been any progressive change over the last decade in access to land for production, secure tenure for the agrarian households.	<ul style="list-style-type: none"> • Prioritise the needs and aspirations of marginalised and vulnerable agrarian households in civil society activism and lobbying in policy arenas • Intensify advocacy and mobilisation for progressive change in farmland tenure security for ecologically sustainable farming activities • Scale-up investment in the production, uptake, dissemination and use of knowledge and evidence in aid of higher-frequency outreach, advocacy and mobilisation
To find out what support can be given to rural people who are willing and able to use the land productively and improve their livelihoods if given the necessary support.	<ul style="list-style-type: none"> • Implement training programs and workshops to enhance farming capabilities for ecological and transformative agrarian livelihoods

	<ul style="list-style-type: none"> • Implement/support initiatives for rainwater harvesting and promoting the establishment of food gardens.
To determine how much progress has been achieved to ensure that women and young people, in particular, participate actively in the economy.	<ul style="list-style-type: none"> • Empower the agency and amplify the voices, needs and interests of marginalised women in the agrarian sector • Address barriers to employment, such as discriminatory employment practices on the farms • The challenges of policy implementation, both historical and structural, underscore the urgent need for better implementation to bring about the desired changes
To understand the factors that have contributed to improving the living conditions of rural people, especially women and the benefits of self-organisation.	<ul style="list-style-type: none"> • Encourage membership in social movements to continue because they offer platforms for educational campaigns that emphasise the advantages of belonging to unions and associations, like better working conditions, more voice, and the possibility of bringing about positive change through collective action
To understand the role of agricultural production in addressing food sovereignty and job creation	<ul style="list-style-type: none"> • Promote farmland tenure security as a vital input for ecological and transformative food value chains • Scale up targeted agricultural development assistance so that resource-poor farmers can expand their economic participation • Educate the households about environmentally sustainable methods of crop and livestock farming
To find out what changes can be made to policy to make it more pro-poor with focus on the basic employment conditions of rural citizens.	<ul style="list-style-type: none"> • Design and implement campaigns to ensure that ecological and transformative agrarian progress directly benefit resource poor small farmers, farm workers and other vulnerable rural dwellers • Lobby the state to enforce and implement of all labour rights laws, farmland redistribution policies, appropriate social protection and equitable food value chain restructuring • Implement empowering monitoring and evaluation of agrarian policies for societal impact
To establish how movements can play a part in the development of a bottom-up approach to influence policy.	<ul style="list-style-type: none"> • Encourage and support movements of resource-poor small farmers and farm workers to design, operationalise and execute bottom-up solutions to reinforcing crises that threaten the sustainability of agrarian livelihoods

	<ul style="list-style-type: none">• Construct resilient networks with critical stakeholders in the agrarian sector for shared, integrated and well-coordinated interventions that benefit marginalised agrarian populations• Scale-up investment in the production, uptake, dissemination and use of knowledge and evidence in aid of higher-frequency outreach, advocacy and mobilisation
--	---

REFERENCE LIST

- Adzigbli, W. F., Duku, E., Atampugre, G., Fürst, C., & Nyarko, B. K. (2024). Agricultural land use policies and landscape dynamics: Evidence from rainforest agroecological zone. *Land Use Policy, 142*. 107184.
- Ahmed, A. (2021). Land abandonment after land grabbing: exploring the implications for local climate change adaptation and ecological restoration in Ghana. *Regional Environmental Change, 24(2)*, 71.
- Afrin, T., Nowshin, F., & Hossain, I. (2022). Livelihood challenges and coping strategies of agricultural workers during Covid-19 pandemic. *International Journal of Economics, Business and Accounting Research, 6(2)*, 1398-1405.
- Alden Wily, L. (2018). Collective land ownership in the 21st century: Overview of global trends. *Land, 7(2)*, 68.
- Alden Wily, L. (2021). Challenging the state: Devolutionary tenure transitions for saving and expanding forests. *Human Ecology 49*, 285-295. <https://doi.org/10.1007/s10745-021-00231-2>.
- Alvarez-Echandi, I. (2020). Labor rights under siege in Costa Rica. *NACLA Report on the Americas, 52(4)*, 379-384. <https://doi.org/10.1080/10714839.2020.1840162>.
- Andersson, E., & Gabrielsson, S. (2012). ‘Because of poverty, we had to come together’: collective action for improved food security in rural Kenya and Uganda. *International Journal of Agricultural Sustainability, 10*, 245-262.
- Angeles, L. C., & Hill, K. (2009). The gender dimension of the agrarian transition: women, men and livelihood diversification in two peri-urban farming communities in the Philippines. *Gender, Place & Culture, 16(5)*, 609-629. doi:10.1080/09663690903148465.
- Archambault, C. S., & Zoomers, A. (2015). The pressing need to secure women’s property rights under unprecedented land pressure and tenure reform. In C. S. Archambault and A. Zoomers (Eds.), *Global trends in land tenure reform: gender impacts* (pp. 1-12). Routledge.
- Archambault, C. S., & Zoomers, A. (2015). *Global trends in land tenure reform: gender impacts*. Routledge.

- Baiyegunhi, L. J. S., Majokweni, Z. P., & Ferrer, S. R. D. (2019). Impact of outsourced agricultural extension program on smallholder farmers' net farm income in Msinga, KwaZulu-Natal, South Africa. *Technology in Society*, 57(C), 1-7.
- Belachew, T., Lindstrom, D. P., Gebremariam, A., Jira, C., Hattori, M. K., Lachat, C. K., Huybregts, L., & Kolsteren, P. (2012). Predictors of chronic food insecurity among adolescents in Southwest Ethiopia: a longitudinal study. *BMC Public Health*, 12, 604.
- Bequet, L. (2024). Agricultural productivity and land inequality: Evidence from the Philippines. *The World Bank Economic Review*, 38(2), 229-250.
- Bluwstein, J., & Cavanagh, C. (2023) Rescaling the land rush? Global political ecologies of land use and cover change in key scenario archetypes for achieving the 1.5 °C Paris agreement target. *The Journal of Peasant Studies*, 50(1), 262-294. doi:10.1080/03066150.2022.2125386.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
- Brooks, K., Zorya, S., Gautam, A., & Goyal, A. (2013). Agriculture as a sector of opportunity for young people in Africa. *World Bank Policy Research Working Paper*, (6473).
- Butt, T. M., Hassan, Z. Y., Mehmood, K., & Muhammad, S. (2020). Role of women in agricultural development and their constraints. *Journal of Agriculture and Social Sciences*, 6(3), 53-56.
- Byrne, D. (2022). A worked example of Braun and Clarke's approach to reflexive thematic analysis. *Quality & Quantity*, 56(3), 1391-1412. <https://doi.org/10.1007/s11135-021-01182-y>.
- Carelsen, C. P. R., Ncube, B., & Fanadzo, M. (2021). Classification and characterisation of smallholder farmers in South Africa: a brief review. *South African Journal of Agricultural Extension*, 49(2), 97-106. <https://doi.org/10.17159/2413-3221/2021/v49n2a12821>
- Carleton, T. A. (2017). Crop-damaging temperatures increase suicide rates in India. *Proceedings of the National Academy of Sciences*, 114(33), 8746-8751. doi: [10.1073/pnas.1701354114](https://doi.org/10.1073/pnas.1701354114).
- Centre for Social Excellence. (n.d). How companies in Africa are tackling ongoing challenges of COVID-19. <https://www.earthworm.org/uploads/files/EF-Webinar-Companies-in-Africa-tackle-COVID-19.pdf>.

- Davis, B., Di Giuseppe, S., & Zezza, A. (2017). Are African households (not) leaving agriculture? Patterns of households' income sources in rural Sub-Saharan Africa. *Food Policy*, 67, 153-174.
- Department of Agriculture, Forestry and Fisheries (DAFF). (2011). *Annual Report 2010/2011*. Available at: <https://www.gov.za/documents/department-agriculture-forestry-and-fisheries-annual-report-20102011>.
- Department of Agriculture, Forestry and Fisheries (DAFF). (2017). *Land Audit Report: Phase II: Private land ownership by race, gender and nationality*. Available at: https://www.gov.za/sites/default/files/gcis_document/201802/landauditreport13feb2018.pdf
- Deere, C. D. & Leon, M. (2003). The gender asset gap: Land in Latin America. *World Development*, 31(6), 925-947.
- Doghle, K., Owusu-Ansah, J., & Akaabre, P. B. (2019). The influences of gendered customary land tenure system on food security in Nandom District, Ghana. *African Journal of Land Policy and Geospatial Sciences*, 2(1), 71-88.
- Durán-Agüero, S., Vinueza-Veloz, M. F., González-Medina, G., Carpio-Arias, V., Ríos-Castillo, I., Cavagnari, B. M., Nava-González, E. J., Camacho-López, S., Cordon-Arrivillaga, K., Núñez-Martínez, B., Meza-Miranda, E. R., Ortiz, A., Pérez-Armijo, P., Bejarano-Roncancio, J. J., Ivankovich-Guillen, S., Mauricio-Alza, S., & Landaeta-Diaz, L. (2022). Psychological factors of diet quality among rural populations of Latin America during the COVID-19 pandemic: A cross-sectional study. *Rural and Remote Health*, 22(1), 1-11. <https://doi.org/10.22605/RRH6909>.
- Feyertag, J., Childress, M., Langdown, I., Locke, A., & Nizalov, D. (2021). How does gender affect the perceived security of land and property rights? Evidence from 33 countries. *Land Use Policy*, 104, 105299.
- Farm Radio International. (2021). *Listening to rural people 2021*. Ottawa: IFAD. https://www.ifad.org/documents/38714170/43721925/onair_dialogues_full_e.pdf/fe73de8c-99be-36ce-2e04-f69cdc0228f7?t=1631881790801.
- Food and Agriculture Organization of the United Nations (FAO). (2011). *The state of food and Agriculture 2010-2011: Women In Agriculture Closing the gender gap for development*.

- Food And Agriculture Organization Of The United Nations Rome, 2011. <https://www.fao.org/4/i2050e/i2050e00.htm>
- Food and Agriculture Organization of the United Nations (FAO). (2018). *The gender gap in land rights*. Rome. <https://www.fao.org/3/I8796EN/i8796en.pdf>
- Food and Agriculture Organisation (FAO). (2020). *Digital Agricultural Profile: South Africa*. Available online: <https://openknowledge.fao.org/server/api/core/bitstreams/66fc0ea0-b81f-4b9c-bb03-65da37eb622c/content>.
- Food and Agriculture Organization of the United Nations (FAO). (2020). *Migrant workers and the COVID-19 pandemic*. Rome. <https://www.fao.org/3/ca8559en/CA8559EN.pdf>
- Food and Agriculture Organization of the United Nations (FAO). (2024). Structural data from agricultural censuses. *FAOSTAT Analytical Brief 83*. Rome. [March 2024 update]. <http://www.fao.org/faostat/en/#data/WCAD>.
- Food and Agriculture Organization of the United Nations (FAO). (2024). *Women in agriculture*. Rome. <https://www.fao.org/reduce-rural-poverty/our-work/women-in-agriculture/en/>.
- Food and Agriculture Organization of the United Nations (FAO), International Fund for Agricultural Development (IFAD), United Nations Children’s Fund (UNICEF), World Food Programme (WFP), & World Health Organization (WHO). (2023). *The State of Food Security and Nutrition in the World 2023: Urbanization, agrifood systems transformation and healthy diets across the rural–urban continuum*. Food and Agriculture Organization. doi:<https://doi.org/10.4060/cc3017en>.
- France24. (2021, 02 January). Peru farmers lift roadblock protests over police violence for govt talks. *France24*. <https://www.france24.com/en/americas/20210102-peru-farmers-lift-roadblock-protests-over-police-violence-for-govt-talks>.
- Frimpong, K., Van Etten, E. J., Oosthuizen, J., & Nunfam, V. (2016). Heat exposure on farmers in northeast Ghana. *International Journal of Biometeorology*, *61*, 397-406. https://www.researchgate.net/publication/305952342_Heat_exposure_on_farmers_in_northeast_Ghana.
- Fynn M., van Schalkwyk C. (2022). Redistribution of land remains a man’s world in South Africa. *Mail & Guardian*. 6 February 2022. Available at: <https://mg.co.za/opinion/2022-02-06-redistribution-of-land-remains-a-mans-world-in-south->

[africa/#:~:text=Seventy%2Dtwo%20percent%20of%20farm,for%20farm%20and%20agri cultural%20holdings.](#)

- García-Morán, A., & Yates, J. S. (2022). In between rights and power: Women's land rights and the gendered politics of land ownership, use, and management in Mexican *ejidos*. *World Development*, 152, 105804.
- Georgescu, I. L., & Bercu, F. (2014). Collective action for an equitable food production system. *Agronomy (LVII)*, 400-406.
- Gething, L. (2010). Gender, food and nutrition security in the context of the global economic crisis. *Agenda*, 24, 2-2.
- Gezimu Gebre, G., Amekawa, Y., & Ashebir, A. (2023). Can farmers' climate change adaptation strategies ensure their food security? Evidence from Ethiopia. *Agrekon*, 62(2), 178-103. <https://doi.org/10.1080/03031853.2023.2230959>.
- Groenmeyer, S. (2013). The right to food sovereignty for small scale farmers: Case study of farming cooperatives in Limpopo Province, South Africa. *International Journal of Social Science Studies*, 1, 168-180.
- Guettou, N., & Djurfeldt, A. (2014). Gender and access to food: A case study on Gender differences in access to food through rural to urban food transfers, and its impact on food security in Moses//Garoëb, Windhoek, Namibia. [Master's thesis, Lund University]. LUP Student Papers. <https://lup.lub.lu.se/student-papers/search/publication/4588681>.
- Habib-ur-Rahman, M., Ahmad, A., Raza, A., Hasnain, M. U., Alharby, H.F., Alzahrani, Y. M., Bamagoos, A. A., Hakeem, K. R., Ahmad, S., Nasim, W., Ali, S., Mansour, F., & EL Sabagh, A. (2022). Impact of climate change on agricultural production; Issues, challenges, and opportunities in Asia. *Frontiers in Plant Science*, 13(925548). doi: 10.3389/fpls.2022.925548.
- Hannay, L., & Scalise, E. (2015). Strengthening women's land rights while recognizing customary tenure in Northern Uganda. In C. S. Archambault and A. Zoomers (Eds.), *Global trends in land tenure reform: gender impacts* (pp. 251-267). Routledge.
- Harris, B. & Ingizza, C. (2023, 1 April). Brazil workers' movement steps up land invasions under Lula government. *Financial Times*. <https://www.ft.com/content/2852dec2-ed95-4c53-b68b-0085913ddf04>.

- Harvey, C. A., Saborio-Rodríguez, M., Martínez-Rodríguez, M. R., Viguera, B., Chain-Guadarrama, A., Vignola, R., & Alpizar, F. (2018). Climate change impacts and adaptation among smallholder farmers in Central America. *Agriculture & Food Security*, 7(57), 1-20.
- Hivos. (2020). Covid-19: Farmworkers excluded from government cushion. 11 May 2020. *Hivos*. <https://hivos.org/covid-19-farm-workers-excluded-from-government-cushion/>
- Honig, L. (2022). The power of the pen: Informal property rights Documents in Zambia. *African Affairs*, 121(482),81-107.
- Hunt, D. (2004). Unintended consequences of land rights reform: The case of the 1998 Uganda Land Act. *Development Policy Review*, 22(2), 173–191.
- Hyder, A. A., Maman, S., Nyoni, J. E., Khasiani, S. A., Teoh, N., Premji, Z., & Sohani, S. (2005). The pervasive triad of food security, gender inequity and women's health: Exploratory research from sub-Saharan Africa. *African Health Sciences*, 5(4), 328-334.
- International Fund for Agricultural Development (IFAD). (2015). *Gender and rural development brief: West and Central Africa*. IFAD.
- International Labour Organisation (ILO) (2016). *A study report on working conditions of tea plantation workers in Bangladesh*. Dhaka-1212. https://www.ilo.org/sites/default/files/wcmsp5/groups/public/@asia/@ro-bangkok/@ilo-dhaka/documents/publication/wcms_563692.pdf.
- International Labour Organisation (ILO). (2018). *Rural women at work: bridging the gaps*. Gender, Equality and Diversity & ILOAIDS Branch, Conditions of Work and Equality. ILO. https://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---ilo_aids/documents/publication/wcms_619691.pdf.
- International Labour Organisation (ILO). (2021). *COVID-19 and occupational safety and health in the coffee global supply chain in Colombia: A case study*. Geneva. <https://vzf.ilo.org/insights/covid-19-and-occupational-safety-and-health-in-the-coffee-global-supply-chain-in-colombia/>.
- Jacobs, P. T. (2019) Contextualising socioeconomic change. In P. T. Jacobs (Ed). *Equitable rural socioeconomic change: land, climate dynamics, and technological innovation* (pp. 1-16). HSRC Press

- Jacobs, P. T., & Msulwa, R. (2019). Droughts, floods, carbon footprints and agriculture: The case of South Africa in context. In P. T. Jacobs (Ed.). *Equitable rural socioeconomic change: land, climate dynamics and technological innovation* (pp87-102). HSRC Press.
- Jayne, T. S., Zulu, B., & Nijhoff, J. J. (2006). Stabilizing food markets in eastern and southern Africa. *Food policy*, 31(4), 328-341.
- Johnson, N. L. Kovarik, C., Meinzen-Dick, R., Njuki, J. & Quisumbing, A. (2016). Gender, assets, and agricultural development: Lessons from eight projects. *World Development*, 83. 295-311.
- Kariuki, G. M., Njaramba, J. & Ombuki, C. (2022). Tea production response to climate change in Kenya: An autoregressive distributed lag approach. *American Journal of Engineering Research*, 10(1), 1-26.
- Karugia, J. T. (2009). Rising food prices in eastern and southern Africa revisited: lifting trade barriers is still the answer. *Collective Action News*, 11. <https://cgspace.cgiar.org/items/ff519504-a4d8-4a7f-a492-a015de0c7c15>.
- Kotikot, S. M., Flores, A., Griffin, R. E., Nyaga, J., Case, J. L., Mugo, R., Sedah, A., Adams, E., Limaye, A. & Irwin, D. E. (2020). Statistical characterization of frost zones: Case of tea freeze damage in the Kenyan highlands. *International Journal of Applied Earth Observation and Geoinformation*, 84. <https://www.sciencedirect.com/science/article/pii/S0303243418309899>.
- Kinkinginhoun Medagbe, F. M., Komatsu, S., Mujawamariya, G., & Saito, K. (2020). Men and women in rice farming in Africa: a cross-country investigation of labor and its determinants. *Frontiers in Sustainable Food Systems*, 4, 117. <https://doi.org/https://doi.org/10.3389/fsufs.2020.00117>.
- Lay, J., Anseeuw, W., Eckert, S., Flachsbarth, I., Kubitzka, C., Nolte, K., & Giger, M. (2021). *Taking stock of the global land rush, Analytical Report III*. (September 2021) (www.landmatrix.org). <https://doi.org/10.48350/156861>
- Lokuruka, M. N. (2020). Food and nutrition security in East Africa (Kenya, Uganda and Tanzania): Status, challenges and prospects. In B. Mahmoud (Ed.). *Food Security in Africa*. <https://www.intechopen.com/chapters/74388>.

- Lopez-Ridaura, S., Frelat, R., van Wijk, M. T., Valbuena, D., Krupnik, T. J., & Jat, M. L. (2018). Climate smart agriculture, farm household typologies and food security: An ex-ante assessment from Eastern India. *Agricultural Systems*, 157, 57-68.
- Lowder, S. K., Scoet, J., & Raney, T. (2016). The number, size, and distribution of farms, smallholder farms, and family farms worldwide. *World Development*, 87, 16-29.
- Lowder, S. K., Sánchez, M. V., & Bertini, R. (2021). Which farms feed the world and has farmland become more concentrated? *World Development*, 142, 105455.
- Markelova, H., & Mwangi, E. W. (2010). Collective action for smallholder market access: Evidence and implications for Africa. *Review of Policy Research*, 27, 621-640.
- Masa, R. D., Khan, Z., & Chowa, G. A. (2020). Youth food insecurity in Ghana and South Africa: Prevalence, socioeconomic correlates, and moderation effect of gender. *Children and Youth Services Review*, 116, 105180.
- Masiya A., Mazenda T. (2022). South Africa's small-scale farmers still can't find a place in the food value chain. *The Conversation*. Available at: <https://theconversation.com/south-africas-small-scale-farmers-still-cant-find-a-place-in-the-food-value-chain-190927>.
- Mondal, M. (2013). The role of rural women in agriculture sector of Sagar Island, West Bengal, India. *International Journal of Engineering and Science*, 2(2), 81-86.
- Morando. B., (2023). Subsistence farming and factor misallocation: Evidence from Ugandan agriculture. *The World Bank Economic Review*, 37(4), 57-98.
- Mueller, V., Doss, C., & Quisumbing, A. R. (2018). Youth migration and labour constraints in African agrarian households. *Journal of Development Studies*, 54(5), 875-894.
- Munang, R., & Nkem, J. N. (2011). Using small-scale adaptation actions to address the food crisis in the horn of Africa: Going beyond Food Aid and cash transfers. *Sustainability*, 3, 1510-1516.
- Nahid, N., Lashgarara, F., Farajolah Hosseini, S. J., Mirdamadi, S. M., & Rezaei-Moghaddam, K. (2021). Determining the resilience of rural households to food insecurity during drought conditions in Fars province, Iran. *Sustainability* 13(15). <https://doi.org/10.3390/su13158384>.
- National Planning Commission [NPC]. (2011). *National Development Plan: 2030*. Republic of South Africa.

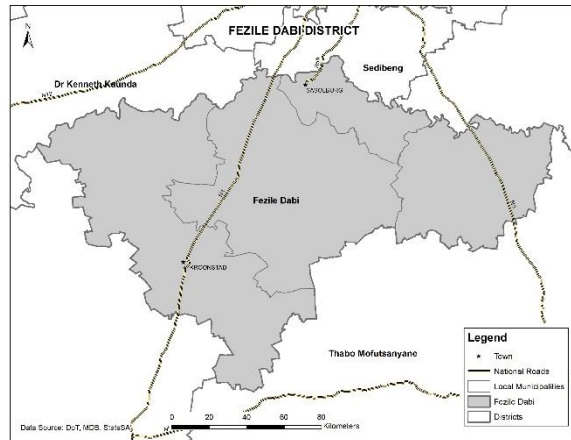
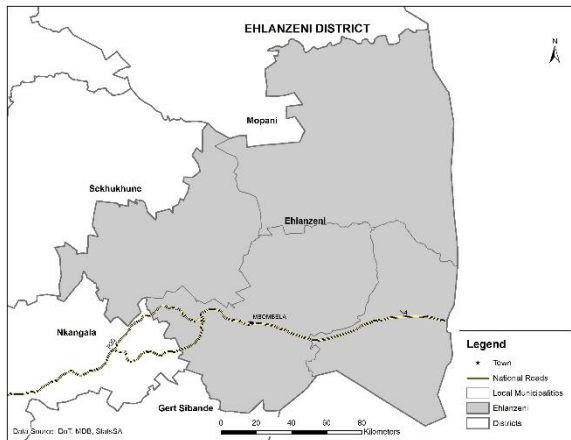
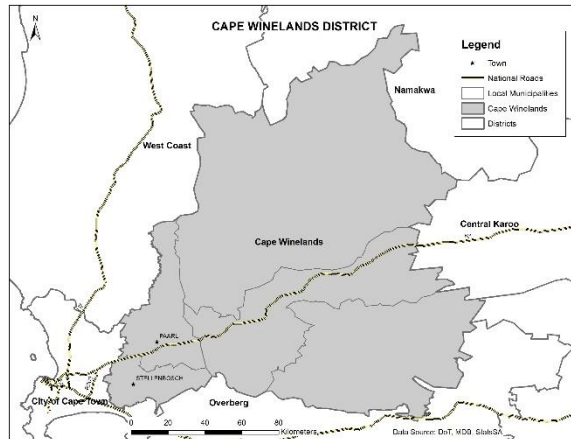
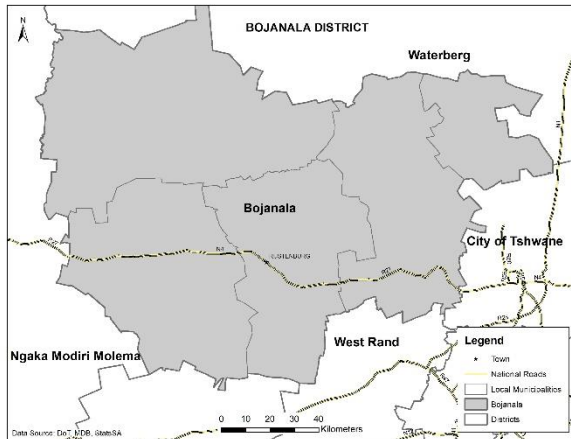
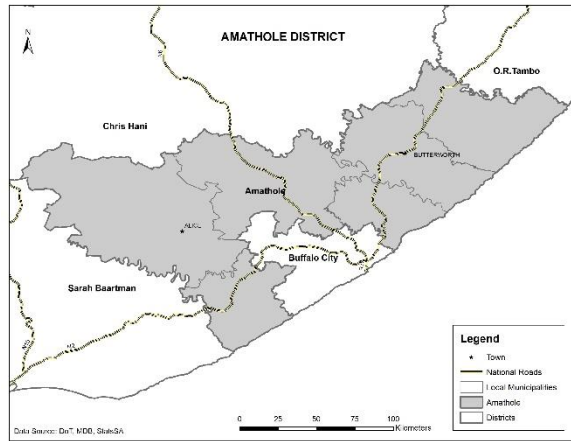
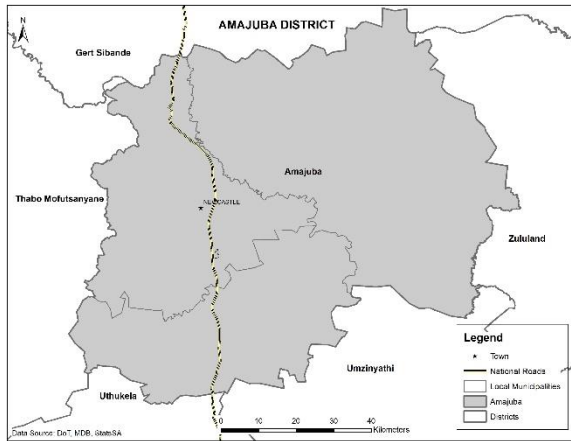
- Ndiku, M. H., Jaceldo-Siegl, K., Singh, P., Sabaté, J., & Sabaté, J. (2011). Gender inequality in food intake and nutritional status of children under 5 years old in rural Eastern Kenya. *European Journal of Clinical Nutrition*, 65, 26-31.
- Nkang, N. M., Omonona, B. T., Yusuf, S. A., & Oni, O. A. (2013). Simulating the impact of exogenous food price shock on agriculture and the poor in Nigeria: Results from a computable general equilibrium model. *Economic Analysis & Policy*, 43(1), 79-94.
- Ogundipe, A. A., Ogunniyi, A., Olagunju, K., & Asaleye, A. J. (2019). Poverty and income inequality in rural Agrarian household of southwestern Nigeria: the gender perspective. *The Open Agriculture Journal*, 13(1), 51-57.
- Onyalo, P. O. (2019). Women and agriculture in rural Kenya: Role in agricultural production. *International Journal of Humanities, Art and Social Studies*, 4(4), 1-10.
- Park, C. M., White, B., & Julia. (2015). We are not all the same: taking gender seriously in food sovereignty discourse. *Third World Quarterly*, 36, 584-599.
- Raney, T., Anríquez, G., Croppenstedt, A., Gerosa, S., Lowder, S. K., Matuschke, I., & Skoet, J. (2011). *The role of women in agriculture*. ESA Working Paper No. 11-02. Agricultural Development Economics Division. Rome: The Food and Agriculture Organization of the United Nations (www.fao.org/economic/esa).
- Richardson, L., Pettigrew, R. N. (2022). Migrant agricultural workers: a comparative analysis of both policy and COVID-19 response in Thailand, Italy, and Canada. *SN Social Sciences*. 2(11), 236.
- Riley, L., & Caesar, M. (2017). No. 09: Comparing household food security in cities of the global south through a gender lens. *Hungry Cities Partnership: Reports and Papers*. <https://scholars.wlu.ca/cgi/viewcontent.cgi?article=1009&context=hcp>.
- Rogito, J. M. (2024). Building resilience of agricultural workers in the agrifood system in a post-COVID-19 Era in Africa. *World Journal of Advanced Research and Reviews*, 21(01), 2899-2905.
- Saka, L., & Adebisi, O. M. (2021). Women, and dispossession and agricultural production in south-East Nigeria: An eco-feminism perspective. *African Journal of Land Policy and Geospatial Sciences*, 4(3), 423-436.
- Sati, V. P. (2023). The future of food and agriculture in India: Trends and challenges. *Sayam-A Journal of Science*, 1(1), 27-39.

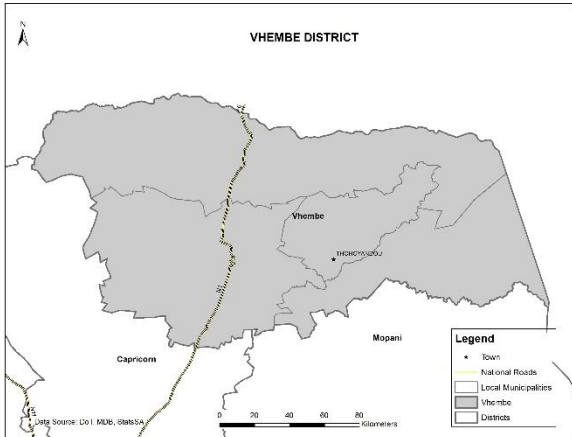
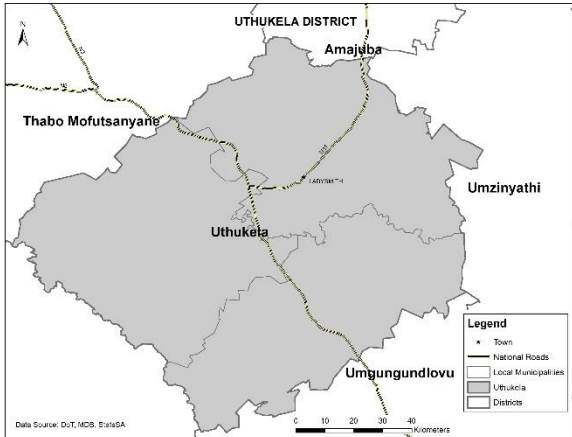
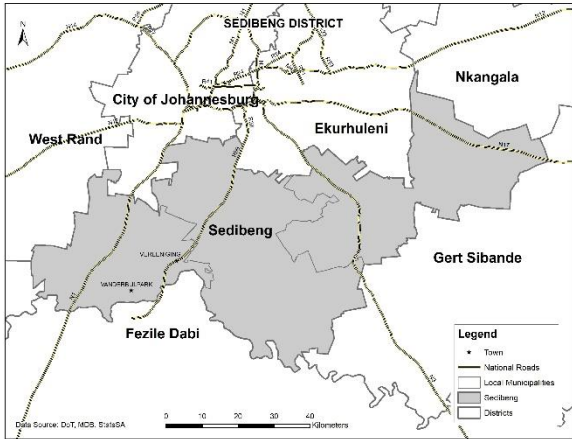
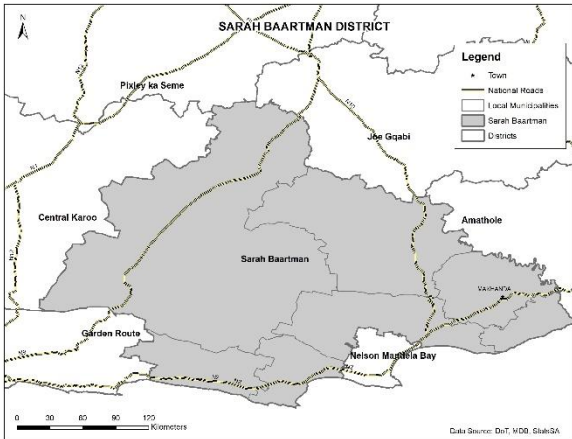
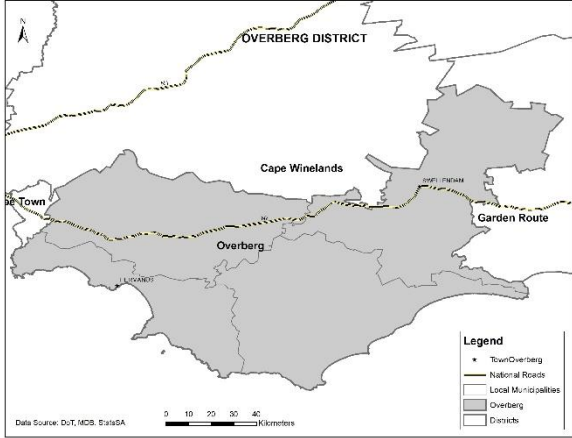
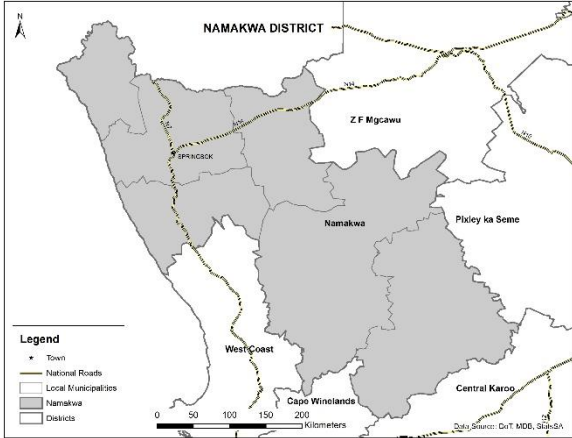
- Shapiro-Garza, E., King, D., Rivera-Aguirre, A. Wang, S., & Finley-Lezcano, J. (2019). A participatory framework for feasibility assessments of climate change resilience strategies for smallholders: lessons from coffee cooperatives in Latin America. *International Journal of Agricultural Sustainability*, 18. 1-14. 10.1080/14735903.2019.1658841.
- Sibanda, S., Munjoma-Muchinguri, P., Ohene-Agyei, P., & Murage, A. W. (2023). Policies for optimal nutrition-sensitive options: a study of food and nutrition security policies, strategies and programs in Ghana, Kenya and South Africa. *Frontiers in Sustainable Food Systems*, 7, 1088216.
- Silva, C. (2023, 11 April). *Landless Movement Vows to Hold New Land Occupations. The Brazilian Report*. <https://brazilian.report/liveblog/2023/04/11/landless-movement-new-land-occupations/>.
- Simtowe, F. P. (2010). Livelihoods diversification and gender in Malawi. *African Journal of Agricultural Research*, 5(3), 204-216.
- South African Government. (2021). Minister Thoko Didiza: The Role of women in Agriculture. Pretoria. Available at: <https://www.gov.za/speeches/minister-thoko-didiza-role-women-agriculture-12-aug-2021-0000>.
- Statistics South Africa (Stats SA). (2016). *Media Release 2 June 2016: General Household Survey (GHS) 2015*. Available online: <http://www.statssa.gov.za/?p=7765>.
- Statistics South Africa. (Stats SA). (2020). *General Household Survey*. Pretoria. Available at: <https://www.statssa.gov.za/publications/P0318/P03182020.pdf>.
- Tagoe, C. A., Tsiboe-Darko, A., Asante, F. A., & Dzudzor, M. (2017). Gendered roles in yam cultivation and food security in West Africa. *Future Agriculture: Socio-ecological transitions and bio-cultural shifts*. Tropentag, September 20-22, Bonn.
- Thornton, P., Van De Steeg, J., Notenbaert, A., & Herrero, M. (2009) The impacts of climate change on livestock and livestock systems in developing countries: A review of what we know and what we need to know. *Agricultural Systems*, 101(3), 113-127.
- Travasso, S. M., Joseph, S., Swaminathan, S., John, A. T., Makkar, S., Webb, P., Kurpad, A., & Thomas, T. (2023). Impact of the COVID-19 lockdown on household diet diversity in rural Bihar, India: a longitudinal survey. *Nutrition Journal*, 22(1), 13. <https://doi.org/10.1186/s12937-023-00842-z>

- Rusenga, C. (2022). Rethinking Land Reform and Its Contribution to Livelihoods in South Africa. *Afr. Rev.* **2022**, *14*, 125-150.
- United Nations Environment Programme. (n.d.). *Kenyan women inspired by UN research launch rural community initiative to address the gender gap in agriculture*. <https://www.unep.org/news-and-stories/story/kenyan-women-inspired-un-research-launch-rural-community-initiative-address>.
- Van Averbek, W., & Khosa, T. B. (2007). The contribution of smallholder agriculture to the nutrition of rural households in a semi-arid environment in South Africa. *Water SA*, *33*(3).
- Van der Merwe, E., Clance, M., & Yitbarek, E. (2022). Climate change and child malnutrition: A Nigerian perspective. *Food Policy*, *113*, 102281. <https://doi.org/10.1016/j.foodpol.2022.102281>.
- Vázquez-García, V. (2015). Aging ejidos in the wake of neo-liberal reform: Livelihood predicaments of Mexican ejidatarias. In C. S. Archambault and A. Zoomers (Eds.), *Global trends in land tenure reform: Gender impacts* (pp. 169-183). Routledge.
- Voorend, K., Anker, R., & Anker, M. (2019). *Living wage study Costa Rica*. Global Living Wage Alliance, Isreal. <https://www.globallivingwage.org/wp-content/uploads/2019/01/LWCR-Benchmark-Report-Final-.pdf>.
- Voorend, K., Abarca D. A., & Leandro, R. S. (2024). A lost opportunity? Collective demands and migrant farm workers in Costa Rica during the pandemic. *Studies in Social Justice*, *17*(1), 48-67.
- Wachira, J., Atela, J., Stacey, P., Outa, G. (2024). NGO-led community-based conservation: A new frontier of territorialization with implications for pastoralists' land tenure and climate change adaptation. *Land*, *13*, 740. <https://doi.org/10.3390/land13060740>.

ANNEXURES

ANNEXURE A: DISTRICT MAP LOCATION - Integrated Maps of 12 Districts

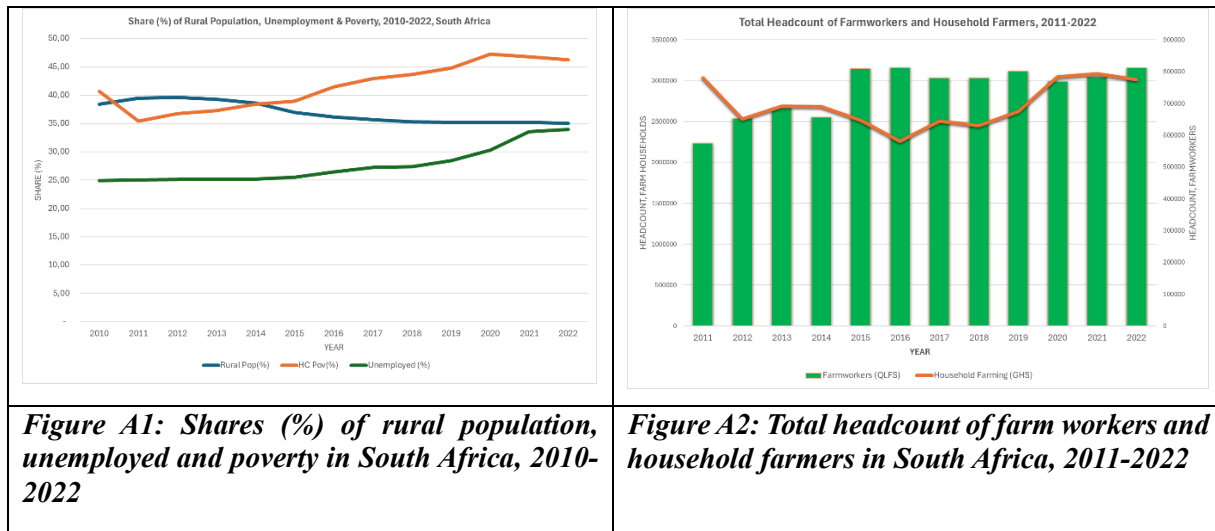




ANNEXURE B: DECADAL BACKGROUND FOR 2023 AGRARIAN HOUSEHOLD STUDY

Information reported in this annexure places the 2023 agrarian household study in a broader context. Sources used for this contextual snapshot include a series of Quarterly Labour Force Surveys (QLFS) and General Household (GHS) surveys produced by the official statistical agency, Statistics South Africa. Survey methodologies used in these national surveys do not allow for district level overviews as the sampling is not representative at such small geopolitical scales. To overcome this limitation, supplementary data was extracted from the Global Insight (REXplorer) database to sketch background trends in population, unemployment and poverty shares in each district for the period 2010-2022.

Figures A1 and A2 summarise data for South Africa, focusing on people who live and work in rural areas. The steady decline in the share of rural residents continues, albeit at a slower pace since 2017 (Fig 1A). Rural headcount poverty and unemployment rates display increasing trends that are uneven. Figure A2 shows that labour use in the two main categories of agriculture, on-farm employment by commercial farmers and household farming, fluctuated over more than a decade since the previous study. After an expansion of agricultural employment until 2015, farming jobs remained volatile. Following the reduced participation in household farming until 2016, a sustained increase in this agrarian livelihood activity occurred in subsequent years without any sharp reversal in the 2020-2022 period.



Reasons for the observed trends vary and it is unlikely that one factor accounts for all the changes. Explanatory factors most likely include labour supply/demand decisions, sectoral composition of provincial/district economies, including the weight of primary agricultural activities in livelihood strategies, spatial and geographic proximity features, and institutional governance variables (such as hypotheses framed around the mandatory minimum wages for farm workers after 2013). While modifications in survey

design and sample size calculations may account for some of the shifts (especially around 2015-2017), explanations based on statistical methodologies go beyond the modest goal of contextualising the 2023 study.

Table A1 offers a closer overview of agrarian labour trends in Figure A2, limited to a comparison of provincial changes from 2011 to 2022. In other words, Table A1 helps to answer the question as to how participation in farm worker employment and household farming changed between these two points in time. Since 2011, Western Cape has accounted for a rising share of farm workers, reinforcing the province's relatively stronger commercial farming orientation. The province's small proportion of household farmers declined. In Limpopo, farm worker employment is expanding alongside a fall in the share of household farmers. Commercial agricultural employment in Eastern Cape slightly expanded over the 2011-2022 period whereas the province's weight in household farming shrunk by a small share. KwaZulu-Natal stands out as a province where proportions of commercial farm employment and household farming have declined. Although Gauteng accounts for a small share of jobs on commercial farms, more households participated in farming over the period under review. All other provinces, except Mpumalanga, experienced very small increments or reductions in agrarian labour over the 12 years, leaving the relative shares virtually unchanged. Even though more households in Mpumalanga participate in farming, its commercial farming sectors have lowered farm worker employment.

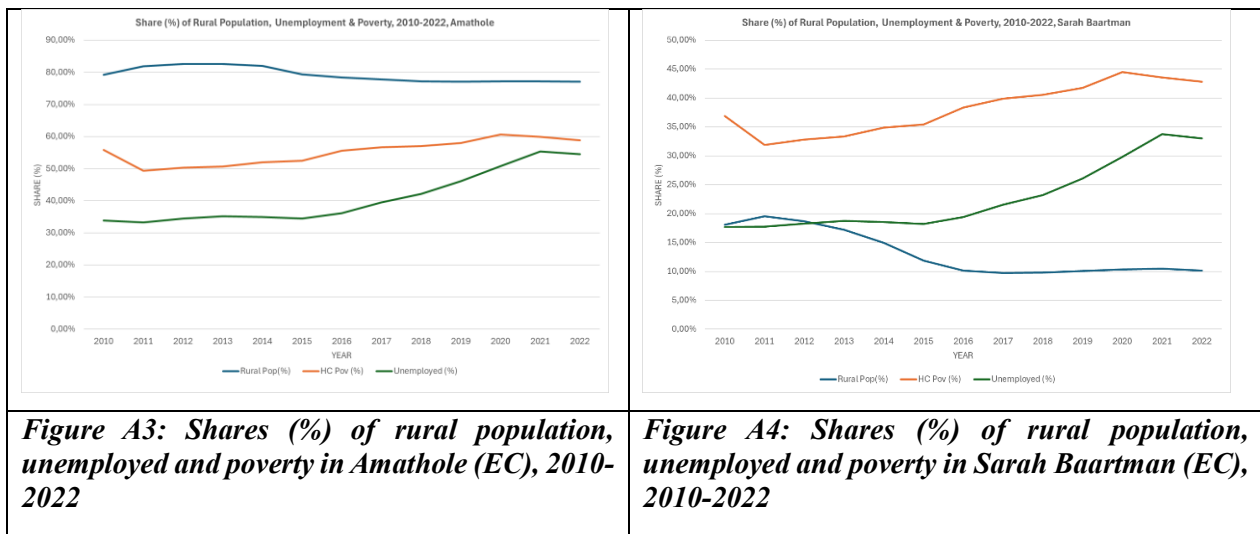
Contrary to what was widely forecasted in 2012, the introduction of minimum wage laws did not trigger large-scale layoffs in provinces that have historically employed proportionately more on-farm workers. This runs counter to standard labour economics in which the demand for labour tends to contract in response to pro-worker rights. However, poverty deepened in these areas, suggesting that employment conditions (weak minimum wage compliance and cuts in worker rights) made farm workers more vulnerable to working poverty. It is also puzzling why household farming, typically practiced on a small scale for subsistence and in conditions of insecure land tenure, has remained so resilient over this period. Investing family labour in crop and livestock agriculture appears to be a direct reaction to acute livelihood vulnerabilities, particularly to help meet the food needs of the family.

Table A1: Changes in agrarian labour shares (%) by Province, 2011-2022

Province	Farm workers (QLFS)			Household Farmers (GHS)		
	2022*	2011*	Diff (Δ= 2022 – 2011)**	2022*	2011*	Diff (Δ= 2022 – 2011)**
Eastern Cape	12,29%	10,35%	1,94%	17,50%	18,49%	-0,99%
Free State	11,28%	11,44%	-0,17%	5,39%	4,63%	0,76%
Gauteng	4,36%	7,68%	-3,32%	10,92%	7,10%	3,82%
KwaZulu-Natal	10,74%	14,18%	-3,44%	20,33%	22,83%	-2,50%
Limpopo	16,64%	12,94%	3,70%	20,20%	23,42%	-3,22%
Mpumalanga	9,80%	12,00%	-2,20%	16,04%	11,62%	4,42%
Northern Cape	5,40%	8,90%	-3,50%	1,72%	1,45%	0,27%
North West	5,73%	5,86%	-0,13%	5,63%	6,95%	-1,32%
Western Cape	24,47%	16,92%	7,55%	2,27%	3,51%	-1,24%

Notes: *provincial share in respective national total; **difference in relative share for each province;
Sources: Statistics South Africa, Quarterly Labour Force Survey; General Household Survey

Figures A3 and A4 display trends for Amathole and Sarah Baartman, respectively. The post-2011 decadal snapshot shows that Amathole is a rural district that has experienced only a moderate fall in this demographic pattern. From 2016 onwards, a growing proportion of district residents fell into poverty and unemployment. Sara Baartman is not a predominantly rural district with a steep decline in its rural population share after 2011 before stabilising around 10% since 2016. The sharp rises in poverty and unemployment in Sara Baartman after 2015 suggest that outmigration brought virtually no relief to the living standards crises afflicting people that reside in this district.



Figures A5 and A6 display trends for Fezile Dabi and Sedibeng, respectively. After a marginal uptick in the small rural share of Fezile Dabi’s population up to 2011, a rapid fall in rural residents set in until about 2016. Whilst an irreversible pattern of exit from rural parts of Fezile Dabi might be slower post-2017, poverty and unemployment continue to rise. Sedibeng has a relatively small rural population (below 5%) with a wavelike trend pointing towards a high degree of rural-urban mobility. However, while poverty steadily expanded, the rapid surge in unemployment shows no clear signs of moderating.

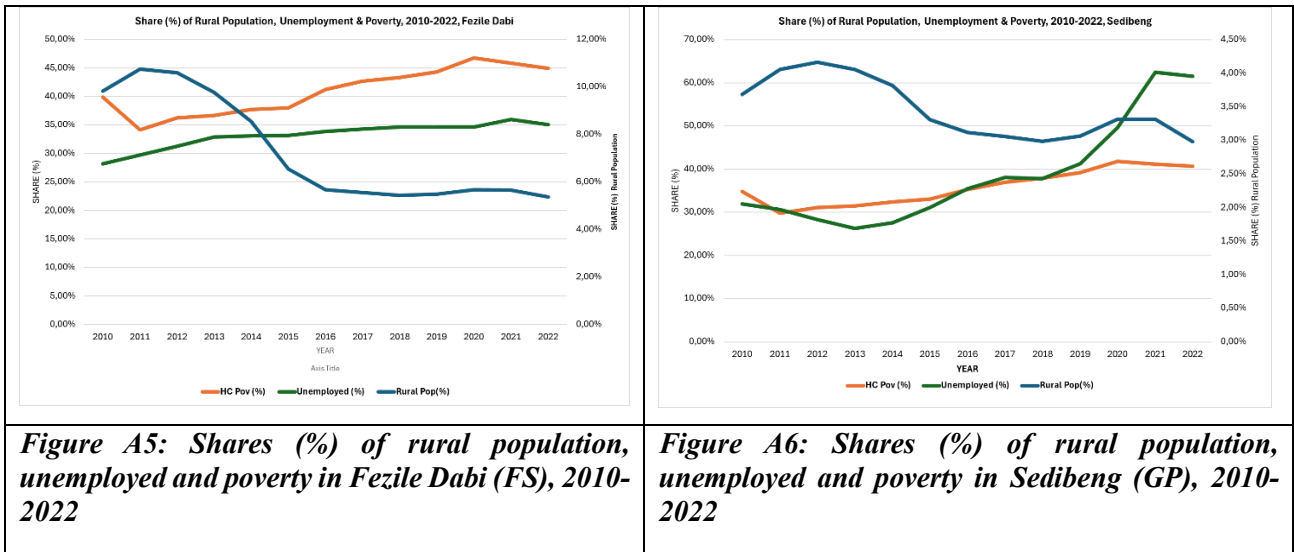


Figure A5: Shares (%) of rural population, unemployed and poverty in Fezile Dabi (FS), 2010-2022

Figure A6: Shares (%) of rural population, unemployed and poverty in Sedibeng (GP), 2010-2022

Figures A7 and A8 display trends for Amajuba and uThukela, respectively. In Amajuba, the share of the rural population has been sinking below 50% since 2014, following a marginal shift above 50% for a few years. This temporary growth in Amajuba’s rural residents seems like an anomaly and might be as a result of a switch in statistical methods. The shares of residents living below the poverty line and who are unemployed expanded, with the marked worsening in the unemployment status of people in the district after 2018. uThukela’s is predominantly rural with the proportion of rural dwellers fluctuating around 70%. People in this district are also afflicted by higher levels of poverty and joblessness.

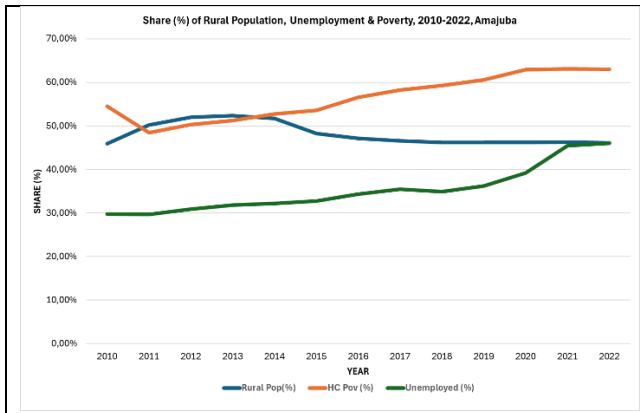


Figure A7: Shares (%) of rural population, unemployed and poverty in Amajuba (KZN), 2010-2022

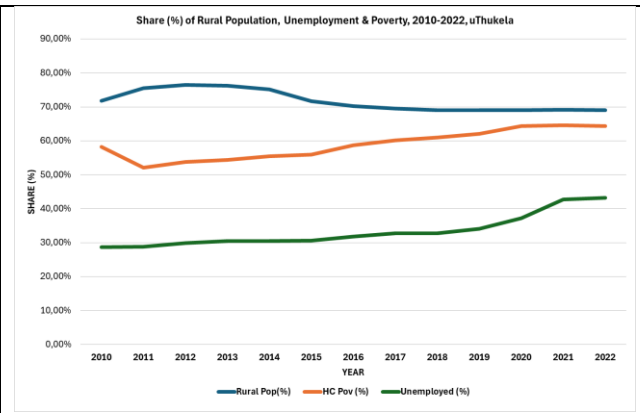


Figure A8: Shares (%) of rural population, unemployed and poverty in uThukela (KZN), 2010-2022

Figures A9 and A10 display trends for Vhembe and Ehlanzeni, respectively. Vhembe has remained a deeply rural district with minimal outmigration. Poverty and unemployment in Vhembe are positively correlated, except for the 2010-2018 period when unemployment gradually ebbed before expanding at a quicker pace. Residents in Ehlanzeni are concentrated in rural areas. The co-movement of poverty and unemployment in this district post-2015 differs from a slight divergence in the preceding years.

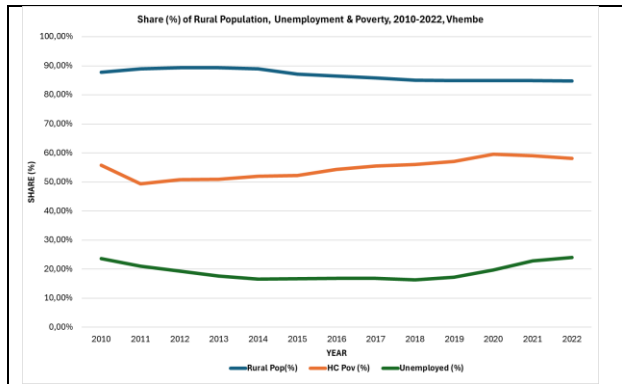


Figure A9: Shares (%) of rural population, unemployed and poverty in Vhembe (LP), 2010-2022

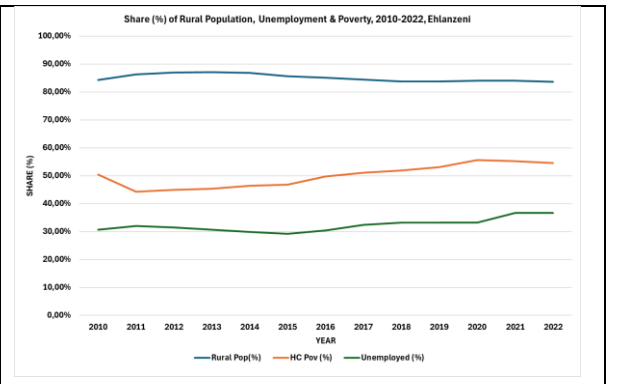


Figure A10: Shares (%) of rural population, unemployed and poverty in Ehlanzeni (LP), 2010-2022

Figures A11 and A12 display trends for Namakwa and Bojanala, respectively. Even though Namakwa district hosts a relatively small rural population – hovering around 10% in 2022- the sustained decline until 2016 was followed by greater fluidity in rural-urban migration patterns. Poverty and unemployment rates in Namakwa rise together, but this cycle breaks down after 2020 for reasons that merit closer investigation. In Bojanala, rural residents remain in the majority of the population even after a few years of intensive rural

(2013-2017). The post-2017 acceleration in Bojanala’s unemployment is a striking feature of the livelihood crisis that face residents in the district. It is puzzling that the poverty rates in Bojanala flattened out after 2020 and whether this positive development will be self-sustaining. This turning point marks an end to the rising tide of poverty in the preceding decade – alongside unemployment.

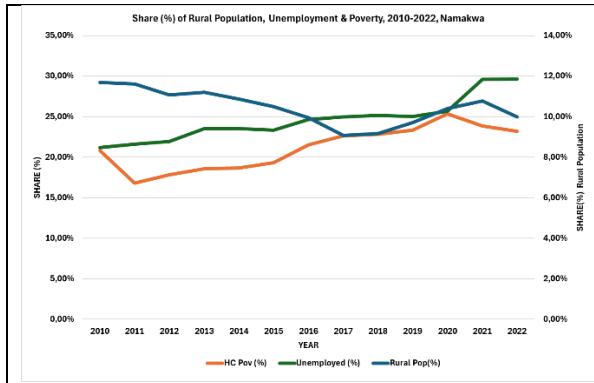


Figure A11: Shares (%) of rural population, unemployed and poverty in Namakwa (NC), 2010-2022

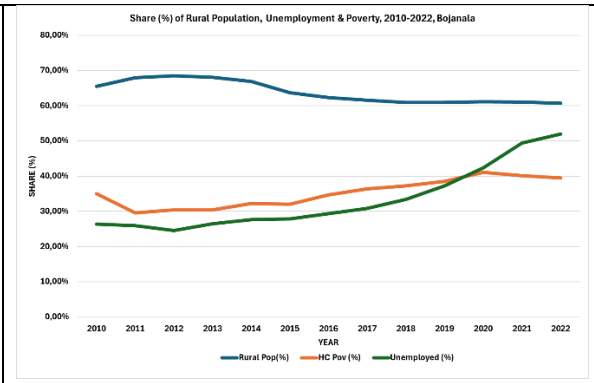


Figure A12: Shares (%) of rural population, unemployed and poverty in Bojanala (NW), 2010-2022

Figures 13 and 14 display trends for Cape Winelands and Overberg, respectively. The rural population in Cape Winelands continues to fall albeit at a speed much slower than before 2017. While poverty has climbed higher until 2020, unemployment fell for the 2013-2019 period. After 2019, unemployment and poverty in Cape Winelands went through a positive co-movement wave. Overberg’s rural population is shrinking but the post-2017 decrease slower than before this ‘turning point’. The step rise in unemployment from 2019 onwards has in effect reversed the promising reduction in joblessness between 2013 and 2018. More residents in Overberg are falling into poverty and it is unclear if the post-2019 improvements will continue.

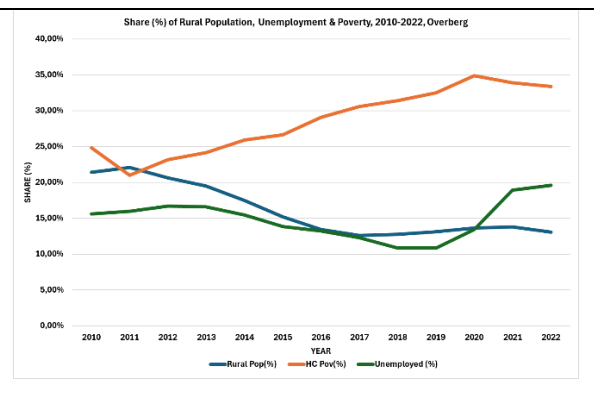
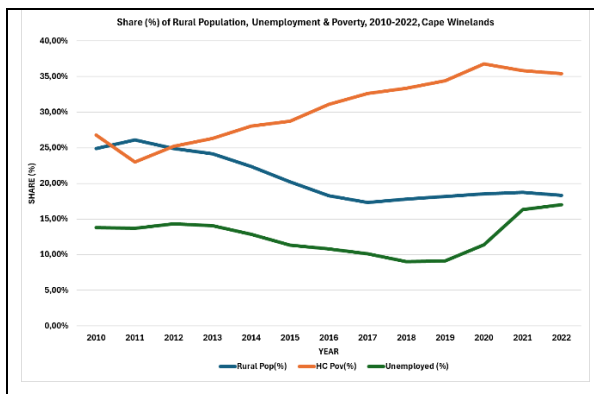


Figure A13: Shares (%) of rural population, unemployed and poverty in Cape Winelands (WC), 2010-2022

Figure A14: Shares (%) of rural population, unemployed and poverty in Overberg (WC), 2010-2022

ANNEXURE C: SELECTIVE SAMPLE HEADCOUNT INFORMATION

Table C1: Headcount of surveyed participants for female and male-headed agrarian households, 2023

Variable	Female-Head	Male-Head	Total Sample
All Household Members	2964	2499	5463
Work force headcount	1716	1493	3209
Unemployed headcount*	949	730	1679
<i>Unemployed share*</i>	<i>55,3</i>	<i>48,89</i>	<i>52,1</i>

Note: *Unemployment is indicative rather than based on standardised definitions measured in official surveys. The ARHE questionnaire is a subjective response obtained from the main survey participant in each household.

Table C2: Headcount of surveyed participants for female and male-headed agrarian households 2023, by district municipality

District Municipality	Variable	Total (Avg. share)	Female Head	Male Head
Amathole	All Household Members	488	315	173
	Work force headcount	333	214	119
	<i>Unemployed share</i>	<i>40,78</i>	<i>46,26</i>	<i>35,29</i>
Sarah Baartman	All Household Members	541	185	356
	Work force headcount	291	104	187
	<i>Unemployed share</i>	<i>41,59</i>	<i>35,58</i>	<i>47,59</i>
Fezile Dabi	All Household Members	343	91	252
	Work force headcount	149	37	112
	<i>Unemployed share</i>	<i>65,91</i>	<i>64,86</i>	<i>66,96</i>
Sedibeng	All Household Members	195	125	70
	Work force headcount	112	75	37
	<i>Unemployed share</i>	<i>44,33</i>	<i>40</i>	<i>48,65</i>
Amajuba	All Household Members	465	227	238
	Work force headcount	374	190	184
	<i>Unemployed share</i>	<i>34,48</i>	<i>35,26</i>	<i>33,7</i>
Uthukela	All Household Members	599	513	86
	Work force headcount	275	224	51
	<i>Unemployed share</i>	<i>85,28</i>	<i>80,36</i>	<i>90,2</i>

Vhembe	All Household Members	394	166	228
	Work force headcount	229	89	140
	<i>Unemployed share</i>	<i>59,22</i>	<i>66,29</i>	<i>52,14</i>
Ehlanzeni	All Household Members	486	302	184
	Work force headcount	222	141	81
	<i>Unemployed share</i>	<i>83,39</i>	<i>86,52</i>	<i>80,25</i>
Bojanala	All Household Members	409	216	193
	Work force headcount	254	123	131
	<i>Unemployed share</i>	<i>67,1</i>	<i>72,36</i>	<i>61,83</i>
Namakwa	All Household Members	494	154	340
	Work force headcount	303	95	208
	<i>Unemployed share</i>	<i>36,21</i>	<i>36,84</i>	<i>35,58</i>
Cape Winelands	All Household Members	502	369	133
	Work force headcount	312	236	76
	<i>Unemployed share</i>	<i>41,5</i>	<i>47,46</i>	<i>35,53</i>
Overberg	All Household Members	547	301	246
	Work force headcount	355	188	167
	<i>Unemployed share</i>	<i>48,62</i>	<i>50,53</i>	<i>46,71</i>