

LASER PULSE

Long-term Assistance and Services for Research (LASER) Partners for University-Led Solutions Engine (PULSE)

DESK REVIEW REPORT ON OCCUPATIONAL ASPIRATIONS, OPPORTUNITY STRUCTURES AND BARRIERS TO YOUTH LIVELIHOOD TRANSFORMATION IN WEST HARARGHE ZONE OF OROMIA REGIONAL STATE, ETHIOPIA

SUPPLEMENT TO AGREEMENT NO. AID-7200AA18CA00009

AOR Name: Kevin Roberts

SEPTEMBER 2022

This publication was produced for review by the United States Agency International Development (USAID). It was produced for the LASER PULSE Project, managed by Purdue University. The views expressed in this publication do not necessarily reflect the views of USAID or the United States Government.



USAID
FROM THE AMERICAN PEOPLE

P **PURDUE**
UNIVERSITY®



PROJECT BACKGROUND

This desk review report is produced by the Youth Empowerment through Livelihood Transformation in Agro-Pastoral Areas of East and West Hararghe Zones, Oromia Regional State, Ethiopia project. The project has been supported by the United States Agency for International Development (USAID) through the LASER PULSE mechanism. It has been implemented by Haramaya University in partnership with Oromia Pastoralist Area Development Coordination Commission in selected agro-pastoral areas in East and West Hararghe zones in Oromia region, Ethiopia. More information about the project is available in the project webpage [here](#).

ABOUT LASER PULSE

LASER (Long-term Assistance and SERVICES for Research) PULSE (Partners for University-Led Solutions Engine) is a \$70M program funded through USAID's Innovation, Technology, and Research Hub, that delivers research-driven solutions to field-sourced development challenges in USAID partner countries.

A consortium led by Purdue University, with core partners Catholic Relief Services, Indiana University, Makerere University, and the University of Notre Dame, implements the LASER PULSE program through a growing network of 3,000+ researchers and development practitioners in 74 countries.

LASER PULSE collaborates with USAID missions, bureaus, and independent offices, and other local stakeholders to identify research needs for critical development challenges, and funds and strengthens the capacity of researcher-practitioner teams to co-design solutions that translate into policy and practice.

ACKNOWLEDGMENTS

The research team is very grateful to those individuals and organizations, from both East and West Hararghe zones, who provided us with secondary data used in the preparation of this review report. We thank Haramaya University President, Dr Jemal Yousuf, and the entire top management for their unreserved support in the process of implementing the project. Finally, we would like to thank the finance administration directorate of the university for facilitating the payment for the project.

SUGGESTED CITATION

Endris, Getachew S., Muluken G. Wordofa, Chanyalew S. Aweke, Jemal Y. Hassen, Jeylan Wolyie, Dereje Kifle, Million Sileshi, Kadija Kadiro, Abdulmuen M. Ibrahim and Kidesena Sebsibe. 2023. Training Manual for Youth Entrepreneurship and Enterprise Development: West Lafayette, IN: Long-term Assistance and Services for Research - Partners for University-Led Solutions Engine (LASER PULSE Consortium).

Table of Contents

List of Tables	4
List of Figures	4
Executive Summary	5
1. Introduction	8
2. Study Methods and Tools	8
3. General Description of the Study Location	12
3.1. Location of Miesso Woreda	12
3.2. Population and demographic information of Miesso	13
3.3. Ecological environment	13
3.3.1. Topography	13
3.3.2. Climate	13
3.3.3. Vegetation and wildlife	14
3.3.4. Water resources	14
3.3.5. Soil type	15
3.3.6. Shocks and vulnerability	16
3.3.7. Land use and Land Cover	17
3.4. Social and productive environment	18
3.4.1. Agriculture/Farming system	18
3.4.2. Resource mobilization and socio-economic dynamics	19
4. Youth, Aspirations, and Agriculture	19
5. Enabling Environment and Challenges for Youth Livelihood Transformation	22
5.1. Youth-friendly policies and rural land proclamations	23
5.2. Infrastructure facilities and institutions	23
5.2.1. Transportation facilities	23
5.2.2. Education	23
5.2.3. Human and Livestock Healthcare services	25
5.2.4. Agricultural Extension services	25
5.2.5. Water services	26
5.3. Market context	27
5.4. Financial institutions	27
5.5. Local actors and networks to enable youth transition.	28
5.5.1. Climate change actors	28
5.5.2. Market actors	28
5.5.3. Agricultural Extension and Advisory service actors	28
5.5.4. Health service actors	28
5.5.5. Organizations operating in Miesso	29
5.6. Social and cultural landscape (indigenous institutions)	34
6. Challenges that hinder successful youth transition	34
7. General conclusion and recommendations	36
References	39

List of Tables

Table 1 Definition of eligibility criteria for inclusion	10
Table 2 Population sizes of the 31 Rural Kebeles and two Towns disaggregated by sex.	13
Table 3 Land use pattern of Miesso district	17
Table 4 Livestock resource base of Miesso Woreda	18
Table 5 Student-teacher ratio of Miesso Woreda by the year 2021	25
Table 6 Small scale irrigation schemes and estimated beneficiaries	27
Table 7 Active NGO Projects for FY 2009/2010E.C in West Hararghe Zone and youth inclusion	30
Table 8 Major challenges affecting successful youth livelihood transformation.	35

List of Figures

Figure 1 Inclusion and exclusion criteria for the systematic review of relevant studies and unpublished reports	9
Figure 2 Location map of West Hararghe zone.	12
Figure 3 Drainage System	15
Figure 4 Women and girls marching to fetch water in Miesso - Hamaressa Kebele.	15
Figure 5 Land use and Landcover map of Miesso.	17
Figure 6 Number of schools in Miesso Woreda in 2021.	24
Figure 7 Students school enrollment in 2021 in Miesso Woreda disaggregated by sex.	24
Figure 8 Number of DAs in Miesso Woreda	26

Executive Summary

Background

Youth, from agro-pastoral and pastoral areas, make up an important part of the labor force in agriculture and food production in Ethiopia. However, in recent years many young males and females express little interest in the agricultural sectors and the local area. The big challenge for agriculture and rural development policy and research today is how to effectively empower, engage and capacitate the rural youth as agents of change for rural transformation and make the rural area an appealing place for the youth to live and work. Nonetheless, the literature on rural youth (especially youth from fragile ecosystems) and their role in rural transformation is very limited. In addition, the policy narrative widely portrays the youth as a problem that needs to be addressed using policy tools. Understanding the socio-economic, ecological, and policy environment in which the youth operate including policy strategies and development interventions may provide useful insight into designing a youth-inclusive agricultural and rural development agenda. This study was carried out as a systematic review to assess youth aspirations, the context of agroecology, and development interventions for youth livelihood transformation in the Miesso district, Ethiopia.

Methods

This study was carried out as a systematic review (using both published and unpublished sources) to assess the context of agroecology and development interventions for youth livelihood transformation in Miesso district, West Hararghe zone, Ethiopia. It aimed to produce reports on existing policy strategies, practices, and development interventions, as well as factors affecting youth participation in existing development interventions. More specifically, the study assessed the enabling environment and challenges for youth livelihood transformation for participation in existing development interventions in Agro-Pastoral Areas of East and West Hararghe Zones. We used Google scholar and SCOPUS search engines to cover academic sources (such as journal articles, book chapters, policy briefs, conference proceedings, books, working reports and theses), and practice-oriented sources (paper and report publications by international organizations and research centers such as CSA, USAID, IFPRI, and FAO websites). For internet sources, the search protocol focused on the article title, abstract, and keywords. Keywords used for searching relevant documents included Miesso district; youth transformation; youth aspirations; opportunity structures; enabling environment; challenges; Agro-Pastoral Areas; Ethiopia; West Hararghe Zones. In this study, relevant literature and publications between the years 2008 and 2022 were considered for review (unless for general information, in which we also considered older literature). Unpublished documents (district performance reports, external evaluation reports, and project reports), obtained from offices at the target woredas in the West Hararghe zones, were carefully identified and sorted out for review by developing inclusion and exclusion criteria. These were: geographic location, date of publication, type of publication, reported outcomes, peer review, reports by reputable international and National organizations, and validated reports (for local level unpublished reports). Data from the systematic review were analyzed mainly using thematic and content analysis. As such data were organized into themes. Relevant information was reviewed, synthesized, and analyzed based on key predefined topics (parameters) and additional categories (topics) that emerged during the data analysis. Based on the emerging themes, similar sections were merged. Finally, patterns of relationship were established.

Findings

- The youth make up an important part of the labor force for food and agricultural production in pastoral and agro-pastoral areas. Nonetheless, very limited attention is given to the youth and their occupational aspirations. The youth continue to face major socio-economic, agroecological, institutional and policy-related challenges, constraining their successful transition.
 - The major challenges that hinder successful youth transition in pastoral and agro-pastoral areas include: (1) negative local customs and norms; (2) limited access to financial services ; (3) limited education and technical capacity; (4) lack of supportive infrastructure and input-output markets; (5) an inhospitable administration and policy environment ; and (6) weather and climate-related shocks.
 - Some of these challenges have different implications for young men and young women and may affect them differently and youth differently, suggesting the need for gender-specific interventions and programs.
 - Youth have varying aspirations and dreams. The most common aspirations include (1) owning draught animals, land, bicycles, or motorbikes for transporting their farm produce to stores or markets; (2) getting an education, and (3) seeking a career in urban areas.
 - These aspirations are shaped by their own personal experiences, gender, local context, access to media, and role models.
 - Gender—mediated by the local contextual structure consisting of values, attitudes, norms, and forms of behavior—plays a very important role in the way key productive resources, such as land and credit, are acquired by young men and women, and how aspirations develop. Such processes often discriminate against young mothers and girls in accessing and utilizing such resources.
 - Contrary to the popular narrative that portrays youth as ready to exit the rural area, there is a gradual attitudinal shift among the youth demonstrated by a growing number of youngsters who envisioned a future within their home country and the local area.
 - Environmental degradation; limited access to land, and rural-urban development inequalities are some of the reasons why rural youth do not pursue agricultural-based careers.
- Several development interventions have been implemented in pastoral areas, but very few target young people as their direct beneficiaries.

Recommendations

Based on the above key findings, the following 5 key recommendations are proffered to facilitate youth livelihood transformation in pastoral and agro-pastoral areas:

- Recommendation 1: Consider the vast complexities and the context in which the agro-pastoral/pastoral youth operate. Youth problems are complex. Strategies to address youth issues by government and policy makers should consider the vast complexities and the context in which the agro-pastoral/pastoral youth operate. It is also important to consider internal dynamics between and among the youth groups. As such, the appropriate development pathway and livelihood strategies for the youth should reflect its particular characteristics and the level of transformation within the country's economy. The choice should depend on the type of constraints the youth face, and their aspirations, and targeting them should be based on the proper definition of youth.
- Recommendation 2: Recognize local social capital practices and networks for youth livelihood transformation. Pastoral and agro-pastoral communities have expansive social and cultural resources such as social capital and networks that offer different

services, such as mutual insurance, labour sharing, savings and credit to rural households, to facilitate a meaningful transformation of the youth in the agro-pastoral/pastoral areas. To this end, greater efforts must be undertaken by development partners (such as USAID) and policymakers to recognize the role of social capital and to improve grass-root social capital and community-based mutual support groups for rural youth livelihood transformation. Part of the efforts may include designing a tailor-made program and more socially inclusive, participatory community development projects that can cut across several clans and tribal divides within and across villages.

- Recommendation 3: Stimulate and support youth agripreneurship and the development of off-farming businesses. Promoting youth employment for livelihood transformation requires investment in agripreneurship development. In this regard, project interventions led by the Ministry of Entrepreneurship should consider supporting youth entrepreneurship development and support may also include training for appropriate business selection, technical training, financial support, etc. In addition, such efforts should be supported by the development of a culturally sensitive and youth-friendly financial system such as interest-free finance. The National Ministries of Gender, Labour and Social Development can serve as a key partner in ensuring that programmes are gender-responsive, and leave no one behind by facilitating gender awareness and collaborations to reduce social gender inequalities.
- Recommendation 4: Promote an inclusive extension system for the youth livelihood transformation. The study showed that agricultural extension was not accessible to the male and female youth. Agricultural extension service is often provided at the household level by mainly targeting the male household head. Thus, the Ministry of Agriculture and Natural Resources should design a tailor-made extension system that targets both male and female youth and enforce its implementation by the district bureaus of agriculture in pastoral and agro-pastoral areas. This is also in line with Ethiopia's strategy for the agricultural extension system which recognizes the mainstreaming of gender and youth as one of the pillar strategies to support livelihood transformation.
- Recommendation 5: Conduct primary studies on rural youth to inform inclusive policies and strategies targeting pastoral youth in fragile and conflict-prone ecosystems. Strategies designed to promote youth inclusion and employment in pastoral and agro-pastoral areas in Ethiopia are almost exclusively based on secondary reviews, most of which are based on the context of urban youth. More studies, based on primary data (using a qualitative design), are required to generate an improved understanding of the situation of youth in agro-pastoral or pastoral areas, their aspirations, and opportunity structures. In this regard, national research institutions and universities should provide technical backstopping and conduct local and regional research.

Keywords: youth, aspirations, opportunity structure, development interventions, agro-pastoral, West Hararghe zone

1. Introduction

Most Ethiopian youth live in rural areas where subsistence agriculture and agro-pastoralism are the dominant sources of livelihood. Nonetheless, the literature on rural youth and their role in rural transformation is limited globally (Arslan, et al 2021) and in Ethiopia. The mainstream literature on how to promote youth inclusion, empowerment, and the agency has an urban bias (Trivelli and Morel, 2020). Much of the empirical literature on rural youth also focuses on identifying the resource-related constraints to achieve food security and poverty, with little attention paid to psychological variables such as youth aspirations.

The big challenge remains how to effectively empower, engage and capacitate the rural youth as agents of change for rural transformation. Hence, it is important to have a better understanding of the rural youth in a local socio-cultural context, which includes mapping the socio-economic and ecological environment where the youth operate, investigating how their aspirations are formed, and identifying how those aspirations relate to, opportunity structures, support mechanisms, and challenges. A better understanding of this complex scenario will provide important information on the rural youth and their aspirations to design an effective policy strategy to promote the rural youth in agro-pastoral and pastoral areas and their effective engagement in the rural economy. Against this backdrop, the current study aims to conduct a systematic review to assess: (1) the socio-economic and ecological environment in which the youth operate; (2) youth-focused policy strategies, practices, and development interventions; (3) factors affecting youth participation in interventions; (4) the enabling environment, and (5) challenges for youth livelihood transformation in Agro-Pastoral/pastoral Areas of West Hararghe Zones, Miesso district.

The first part of the report describes the methods used and steps followed in conducting the systematic desk review. In the second section, we present the socio-economic and ecological environment of the study sites, including the population and demographic information of Miesso and its ecological environment. The third section presents the social and productive environment of the study location including agriculture, farming systems, resource mobilization, and social dynamics. The fourth section presents a literature review (theoretical and empirical review) of youth, youth aspirations and agriculture both in African and Ethiopian contexts. The fifth section is a synthesis of the enabling environment and challenges for youth livelihood transformation. More specifically, the section presents the analysis of the institutional environment, market and infrastructure, and services and organizations that enable or hinder youth transitions in the agro-pastoral/pastoral communities. The final section is the general conclusion and recommendation of the study.

2. Study Methods and Tools

This study was carried out as a systematic review of secondary data (both published and unpublished sources) to assess the context of agroecology and development interventions for youth livelihood transformation. It aimed to produce reports on existing policy strategies, practices, and development interventions, as well as factors affecting youth participation in existing development interventions. More specifically, the study assessed the enabling environment and challenges for youth livelihood transformation for participation in existing development interventions in Agro-Pastoral Areas of East and West Hararghe Zones.

In general, for the literature searches, we used Google scholar and SCOPUS search engines to cover academic sources (such as journal articles, book chapters, policy briefs, conference

proceedings, books, working reports and theses), and practice-oriented sources (paper and report publications by international organizations and research centers such as CSA, USAID, IFPRI, and FAO websites). For internet sources, the search protocol focused on the article title, abstract, and keywords. Keywords used for searching relevant documents included Miesso district; youth transformation; youth aspirations; opportunity structures; enabling environment; challenges; Agro-Pastoral Areas; Ethiopia; West Hararghe Zones.

In this study, relevant literature and publications between the years 2008-2022 were considered for review (unless for general information, in which we also considered older literature). Unpublished documents (district performance reports, external evaluation reports, and project reports), obtained from officials at the target woredas in the West Hararghe zones, were carefully identified and sorted out for review based on relevance (see Figure 1 and Table 1 below).

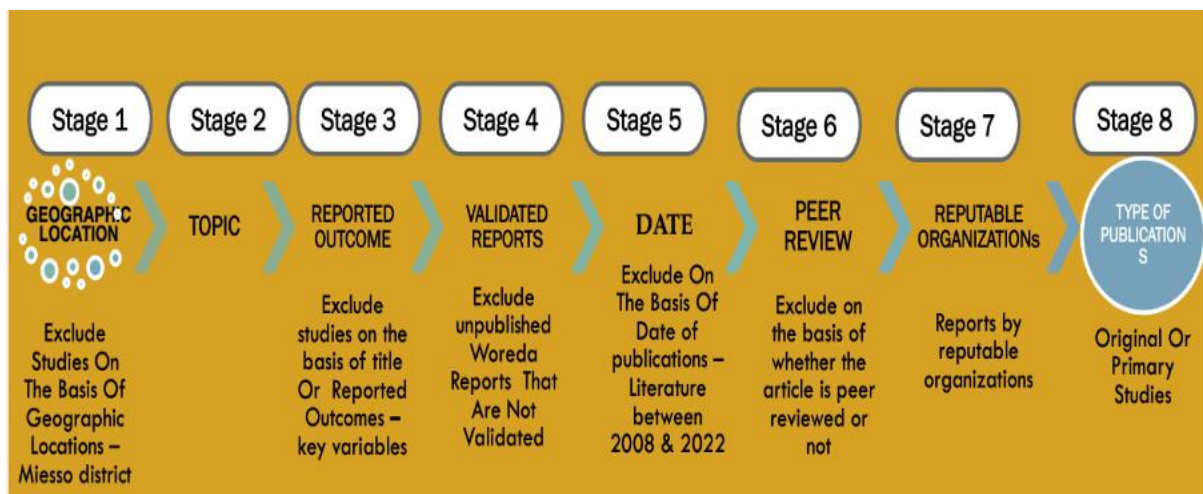


Figure 1 Inclusion and exclusion criteria for the systematic review of relevant studies and unpublished reports

Source: Researcher’s own articulation

Important parameters considered to determine eligibility were: geographic location, date of publication, type of publication, reported outcomes, peer review, reports by reputable international and National organizations, and validated reports (for local level unpublished reports). The definitions of the inclusion criteria are shown in Table 1.

Table 1 Definition of eligibility criteria for inclusion

	Inclusion criteria	Exclusion criteria
1	Geographic location of the study: literature will be limited to the study locations – West Hararhe zone, Miesso district	Studies (literature) will be excluded if not directly related to the target woreda and west Harareghe zone
2.	Reported outcome: literature assessed in terms of the outcome of interest	Contents will be excluded based on the key variables
3	Topic: Studies/reports containing or directly related to youth transformation, policies, and opportunity structures in pastoral communities in Ethiopia	Article with a generic thematic focus on issues other than youth transformation, policies, and opportunity structures in pastoral communities in Ethiopia
4	Unpublished validated woreda reports (performance reports, external evaluation reports, project reports) on the topic (background information – crops grown, demographic information)	Woreda reports that are not verified
5	Date: Latest Literature (2008 onwards)	Reject if under 2008
6	Peer review: peer reviewed articles from a reputable publisher	Reject non-peer reviewed articles
7	Reports of reputable international and National organizations: studies by FAO, IFPRI, CSA, on to nutritionally important, high yielding, and drought resilience crops and vegetables and fruits	Reject if otherwise
8	Type of publications: original (primary) studies on the topic of interest	Studies based on reviews (secondary data) or are short communications

Source: Authors

Validation was a very important part of this systematic review. Information for the desk review was triangulated and validated in serious steps: various data sources (unpublished reports, various types of studies, official government reports, reports by international organizations, journal articles, and primary studies) were employed for data triangulation. Successive validation workshops, organized with multi-stakeholder and research translation partners in different stages, were used as platforms to validate draft reports. Modifications were made to the draft reports afterward.

Data from the systematic review were analyzed mainly using thematic and content analysis. As such data were organized into themes. Relevant information was reviewed, synthesized, and analyzed based on key predefined topics (parameters) and additional categories (topics) that emerged during the data analysis. Based on the emerging themes, similar sections were merged. Finally, patterns of relationship were established. The final report on the context of agroecology and development interventions for youth livelihood transformation was organized based on the following themes: background information; population and demographic information of Miesso; ecological environment; social and productive environment; enabling environment for youth livelihood transformation; challenges for youth livelihood transformation. Quantitative data showing the distribution of institutions and services; ecological environment; social and productive environment; demographic information; and land were summarized using tables and figures.

3. General Description of the Study Location

3.1. Location of Miesso Woreda

West Hararghe Zone is one of the 20 Zones found in the Oromia Regional state. It is bordered by the Somali regional state in the North, the Afar regional states in the North-West and North-East, and the Arsi zone in the South-West (Figure 2). Based on the CSA population projection, the zone has a total population of 2.6 million people in 2018 with a population density estimated at 0.025 km² per person. It has a total number of 457 Kebeles and covers a total area of 1,173,000 hectares. The average landholding is estimated at less than 0.5 hectares per household (West Hararghe zone Disaster Risk Management office, 2019). The zone has a total of 15 woredas (11 highland and 4 pastoral and agro-pastoral Woredas) and two administrative towns. Miesso, Hawi Gudina, Burka Dhintu and Gumbi Bordede Woredas are among the pastoral and agro-pastoral Woredas in the West Hararghe zone. The remaining 11 Woredas mainly depend on crop production and livestock rearing. The altitude of the Zone ranges from 800-2500 masl. Chiro Town and Bedesa town are the two administrative capitals.

Miesso Woreda is bordered in the east by Doba, in the north by Chiro and Guba Koricha, in the northeast by Anchar Woredas, in the northwest by the Somali regional state, and in the South and Southwest by Afar regional state (Figure 2). According to a report from Woreda’s office of Agriculture and Natural Resource (2021), the Woreda has 31 rural kebeles and 2 towns. In terms of ethnic composition, the Woreda is predominantly inhabited by two ethnic groups: the Oromo (Ala, Nole and Ittu clans) and the Somali (Issa and Hawiya clans) (Beyene, 2009).

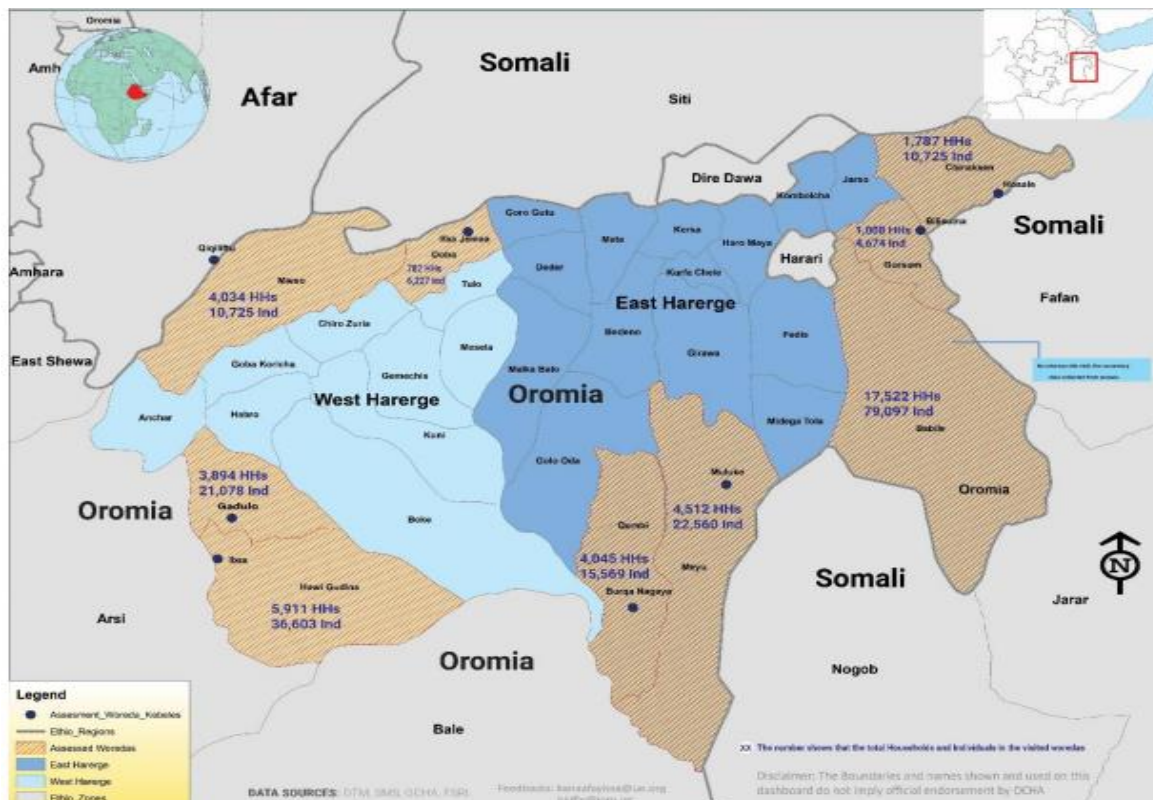


Figure 2 Location map of West Hararghe zone.

Source: OLLRP, 2020

3.2. Population and demographic information of Miesso

Though there is no recent data on the population size of the Woreda, it is estimated that there are about 31,456 households in the Woreda (i.e., 24,256 rural households and 7,200 urban households). The population size of the Woreda is estimated at 144,750 (i.e., with 115,624 rural population and 29,126 urban population). In terms of crude population density (using the 2007 and 2013 censuses as a base), the Woreda has grown from 51 persons /km² in 2007 to 63 persons /km² in 2013 (CSA, 2007). The average household size for rural and urban areas of the Woreda were 4.3 and 5.0 respectively, with an average of 4.6 individuals for both areas (Table 2) (CSA, 2007).

Table 2

Table 2 Population sizes of the 31 Rural Kebeles and two Towns disaggregated by sex.

N	Populatio	HHS			Population			Total		
		Male	Femal	Total	Male	Femal	Total	Male	Femal	Total
1	Rural	1900	5247	2425	4686	44508	91368	6586	49755	11562
2	Urban	5616	1584	7200	1131	10615	21,92	1692	12199	29126
	Total	2462	6831	3145	5817	55123	11329	82,79	61,954	144,75
		9		6	0		6	9		4
		5		6	1		4	6		0

Source: Miesso Woreda office of Agriculture and Natural Resources (2021).

3.3. Ecological environment

3.3.1. Topography

Miesso Woreda covers an area of 257, 344 hectares, of which 82% is plain land, 9% is undulated land, and the remaining 9% belongs to mountains. The Woreda is a part of the Northwestern Rift Valley Escarpment. Most of the Woreda is bounded by the chain of Chercher highlands. The highest point of the Woreda is Asebot Mountain. The lowest place of the Woreda stretched to Awash River to the extreme west.

3.3.2. Climate

Agro-ecologically, West Hararghe Zone is divided into three distinct zones: 10% highland (Dega), 38% midland (Woyna Dega), and 52% lowland (Kola). The altitude of the zone ranges from 900- 2500 masl. Most of Miesso Woreda is found in the tropical climatic zone and classified as lowland (MPSLDP, 2007). According to Miesso Woreda office of Agriculture and Natural Resource (2021), 95% of the Woreda is classified as Kola (lowland), while 5% is Woina-dega. Out of the 31 rural kebeles, 29 are in the kola agro-ecological zone and inhabited by agro-pastoral households. The average annual rainfall of the Woreda ranges between 500 and 700 mm, while the mean temperature ranges between 24°C and 36°C (Miesso Woreda office of Agriculture and Natural Resources, 2021).

There are two commonly known rainy seasons in the woreda: the “Ganna” and “Arfasa” seasons. The “Ganna” (marking the main rainy season) falls in the period between June to September, while the “Arfasa” season falls from March to May. These seasons are the basis for the preparation of the community's seasonal calendar. For instance, during the “Ganna”

season, pastoralists have good access to water for livestock, get moisture to prepare land and plant shorter-duration crops like maize. Whereas land preparation and sowing for long-season crops such as sorghum is performed during the “Arfasa” and harvested during the “Birra” (October to November) season. The movement of livestock is a major seasonal event and coping mechanism in the pastoral and agro-pastoral areas. It occurs during the dry season (Birra season). During this period, pastoralists move their livestock to dry areas in order to access enclosed areas for pasture. The intensity of livestock mobility is greater towards the “Bona” season (December to February) and lowers towards the commencement of the “Arfasa” season as animals and herders begin to march back home with the expectation of the start of the rainy season. Livestock is also marketed on a seasonal basis. For instance, most animals are brought to the local markets during the “Ganna” and “Arfasa” seasons, due to high moisture and feed availability which translates into good body conditions and the price of the animals.

3.3.3. Vegetation and wildlife

Of the 257, 344 ha of land Miesso Woreda occupies, around 56, 296 hectares of forest and 20,458 hectares of grazing land are found. The zone and the Woreda are endowed with various types of natural vegetation and wildlife. However, their distribution varies across Woredas depending on altitude, climatic conditions and population density. Studies showed that most of the vegetation coverage is on the decline due to improper settlement, crop cultivation, and land degradation (OLLRP, 2020). Afro-Alpine, sub-Afro-Alpine, coniferous forest, broad-leaved forest, riverine vegetation, halophytic vegetation and woodland and savanna grasslands are the major types of vegetation found in most of the Woredas of the zone. Shrub, bushes (in the low land), and open woodland are the major vegetation types found in Miesso Woreda. *Acacia nilotica*, *Acacia cial*, *Ziziphus epinacriti*, *Banalitic egiptica* are among the major trees and vegetation. In addition, there are various types of wildlife in Woreda. The major wild animals include lions, monkeys, foxes, and hyenas (Miesso Woreda office of Agriculture and Natural Resources, 2021).

3.3.4. Water resources

Secondary data from Miesso Woreda office of Agriculture and Natural Resources show that the western Hararghe zone has potential for ground and surface waters. The groundwater varies from the hand-dug well to deep wells depending on the depth of the aquifer and water table. Miesso woreda has 8 deep wells, 3 rivers, 2 springs, and 27 ponds. It is indicated that water in some areas has high fluoride and salinity with an impact on human and animal health. Geological structures aligned along the northeast and southwest are the main groundwater feeding structures. Surrounding mountain chains along the south, i.e., Asebot and Fantalle mountains, are considered the major water recharge areas for the entire area and Miesso Woreda (OLLRP, 2020).

The northeast and southwest mountain chains are the major water divide of two river basins, namely Awash and Wabe Shebelle river basins (Ibid). Tributaries emanate from the foot of mountain chains and drain toward the flat and undulating topography of the rift valley to recharge the groundwater. Most of the tributaries and rivers follow the draining structures created by the tectonic activities and rift formations. Multi-stream tributaries are flowing from the elevated areas of the cluster toward Awash River (OLLRP, 2020). Tributaries created from Asebot Mountain have radial pattern flows; whereas the northeast-southwest tributaries are scattered pattern flows (Figure 3)

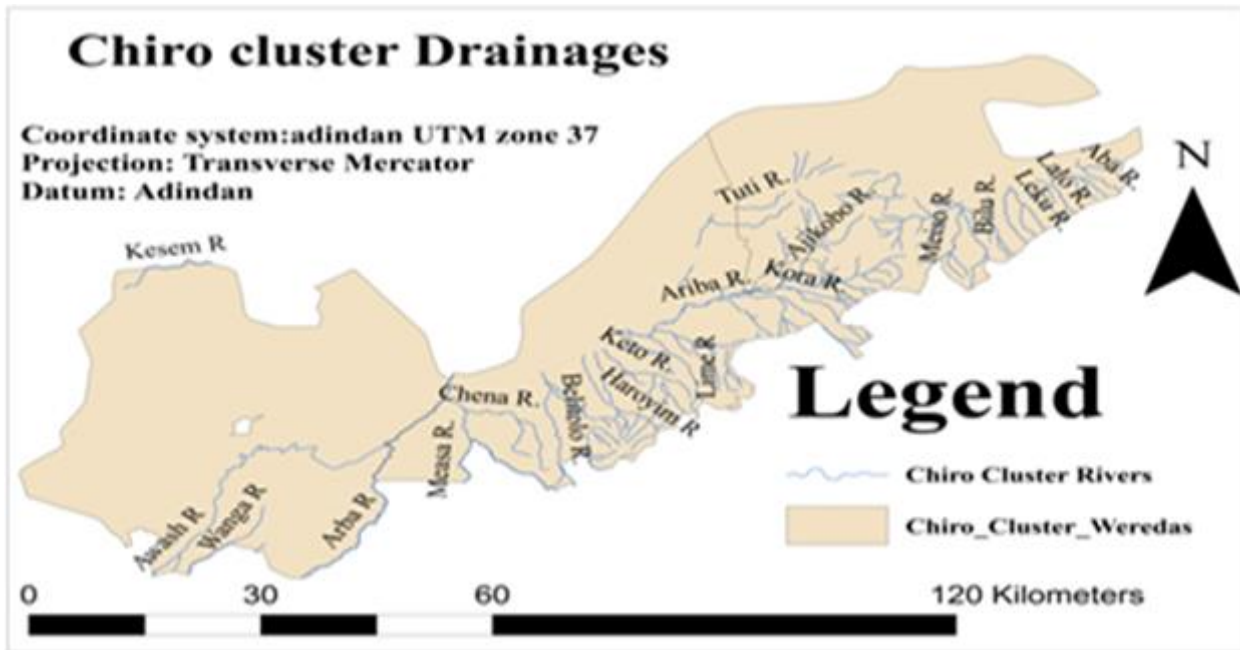


Figure 3 Drainage System

Source: OLLRP, 2020

However, despite such huge potential, the water infrastructure is not well developed. A recent study highlighted that there are acute water shortages for both domestic consumption, livestock and irrigation in the Woreda (Endris and Hassan, 2020). Hence, younger mothers and girls have to march on foot long distances to fetch water (Figure 4).



Figure 4 Women and girls marching to fetch water in Miesso - Hamaressa Kebele.

Source: Endris and Hassan, 2019.

3.3.5. Soil type

According to FAO/UNESCO Soil Classification system, the major soil types of the woreda are Vertic Cambisol (orthic and ferralic), Haplic Luvisol (Orthic) and Eutric Cambisol (Orthic), each accounting for 50%, 16% and 11%, respectively. The Woreda’s office of Agriculture also classified the soil type of Woreda into 3 types: black soil (75%), sandy soil (10%) and mixed soil (15%) (Woreda office of Agriculture and Natural Resource, 2021). The use of commercial fertilizer is very limited in the area. Secondary data from the Woreda

highlights the lack of access to agricultural technologies, including fertilizer, improved seed, and pesticides, by most households working in agriculture (Endris and Hassen, 2020).

3.3.6. Shocks and vulnerability

The risk of loss of rural livelihoods due to shocks, and adverse events that will lead to a decline in household welfare and consumption, are major concerns for communities located in areas predominantly inhabited by communities engaged in pastoral and agro-pastoral livelihood systems (Befikadu et al., 2019). West Hararghe zone and Miesso Woreda are typical examples of such a livelihood system.

West Hararghe zone is a disaster-prone area (Gebremedhin et al., 2006). Lowland agro-pastoral households of the zone with moisture stress, such as Miesso Woreda are particularly more affected. The impact of such shocks is implicated in the resilience and food security of households. Studies show that several thousands of people are in need of food assistance every year. According to the Multi-agency need assessment report of West Hararghe Zone (2021) around 102,463 people are in need of emergency food assistance in 2021.

Drought, flood, disease and pests are the dominant climate-induced shocks affecting livestock and crop production in the Woreda (OLLRP, 2020). Historical climate baseline statistics in the zone and Woreda showed that the livestock population has been decreasing substantially due to continuous drought, high population pressure, soil erosion and expansion of arable land in the district. Livestock diseases such as anthrax, blackleg, and internal and external parasites are major problems constraining livestock production and productivity. The impact of livestock diseases is more damaging when it occurs during the aftermath of a drought period contributing to the poor resistance of the animals to many of the diseases (Multi-agency need assessment report of West Hararghe Zone, 2021).

The increasing use of chemical pesticides and herbicides and habitat loss through land-use changes have substantially reduced honey bee colonies and bee-keeping enterprises in the localities. Crop pests, mainly *Quelea* birds, bollworm, stalk borer and armyworm outbreaks are additional production constraints, while invasive weeds such as *Striga*, a parasitic weed mainly attacking maize and sorghum, rust, and white blight, are major problems causing substantial yield reduction for staple crops (Miesso Woreda office of Agriculture and Natural Resources, 2021). A recent invasion of arable and grazing land by *Prosopis juliflora* is another major challenge constraining crop and livestock production in the locality.

Households in Miesso woreda employ various strategies for coping with the impact of adverse shocks. Asset disposal activities (such as selling more livestock); migration to the nearest urban centers; reducing daily meals; selling charcoal and firewood; formal food aid transfer are among the major coping strategies for coping with consumption and income reductions due to adverse shocks. Cash borrowing from informal mutual support groups and social networks to buy food as well as cover medical expenses is another very common survival mechanism in the woreda. Households also reported access to free labour support, seed loan, and free use of pack animals and oxen using these types of mutual support networks. Indigenous methods such as smoking by woodburning have been reported as coping mechanisms to cure livestock and crop diseases. Planting early maturing crop varieties and water harvesting are among the strategies against early offset of rain (Woreda Disaster Risk Profile, no date).

3.3.7. Land use and Land Cover

The landmass of Miesso Woreda is classified as cultivable land (22%), cultivated land (7%), pasture/grazing land (15%), forest, wood and shrubland (24.0), and land use for social purposes and degraded land (including land for settlement and organizations 32%) (Table 3 and Figure 5).

Table 3 Land use pattern of Miesso district

No	Land Use	2009	
		Area(ha)	Percent
1.	Cultivable land	57,157	22.0
2.	Cultivated Land	17,902	7.0
3.	Pasture /grazing land	38,645	15.0
4.	Forest, Wood and Shrubland	61,683	24.0
5.	Land use for social purpose and degraded Land	81,957	32.0
6.	Total area	257,344	100

Source: Miesso Woreda office of Agriculture and Natural Resources (2021).

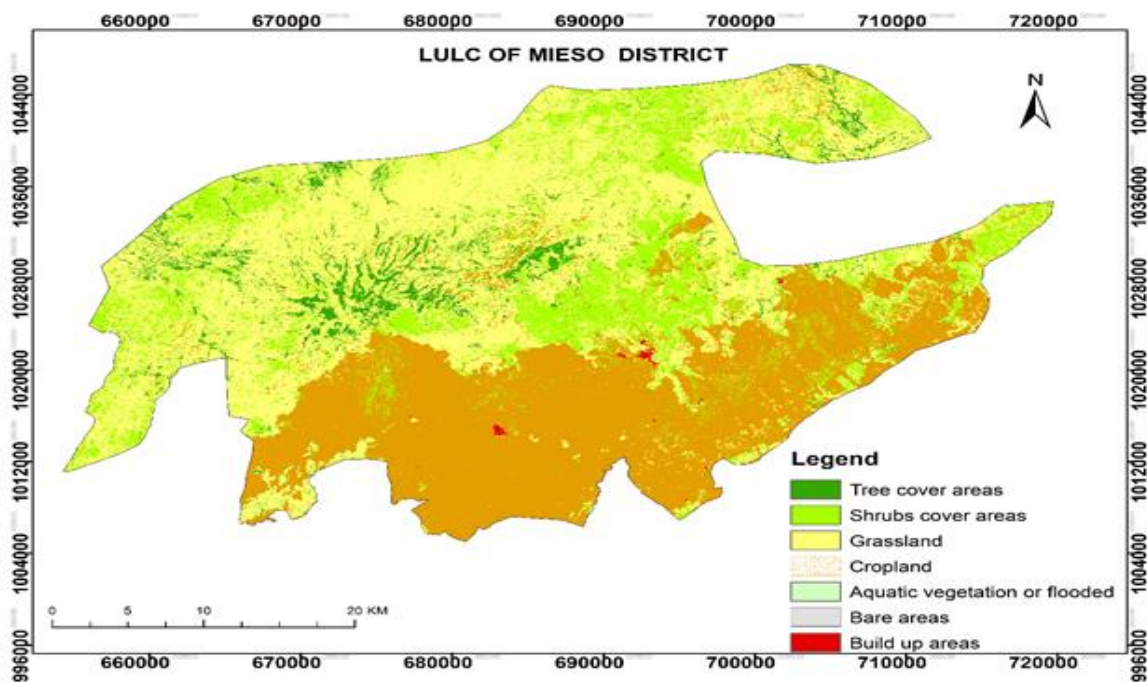


Figure 5 Land use and Landcover map of Miesso.

Source: Credited to Elias Chernet, unpublished.

3.4. Social and productive environment

3.4.1. Agriculture/Farming system

The Woreda has two dominant farming systems: sorghum/pulse/oil crops/livestock (mixed crop/livestock farming system) and the pastoral system. The rural youth constitute an important part of the labor force in both production systems. The crop/livestock farming system is predominantly a Woina-dega livelihood zone. The total number of farm households in this zone is estimated to be 18,336 (83%), with a total population of about 96,651. The total cultivated land (annual and perennial) in this farming system is estimated at 21,877 ha. The total area of the farming system is about 145,864 ha. The average landholding in this farming system is 1.2 ha per household. The common crops grown under this system include maize, sesame, groundnut, haricot bean, teff, flax, and sorghum. khat, sesame, mung bean, vegetables, fruits, coffee and tuber crops are grown as cash crops. A recent study (Endris and Hassan, 2019) shows that mung bean is also increasingly adopted by farmers in the locality mainly to generate income. Most of the cereals are primarily cultivated for own’s consumption. The vegetative part is fed to livestock during drought periods. However, secondary data from the Woreda bureaus show that there is little use of the crop residues after harvest, and there are no practices of conserving and improving the crop residues as animal feed (Woreda office of Agriculture and Natural resource, 2021).

The Pastoral system is the other most important livelihood zone in the Woreda (Beyene, 2016). A study by MPLSDPD (2005) classified pastoralists in the Miesso area into two. One type of pastoralist is sedentary and lives in one area, but with occasional mobility during drought periods to other areas searching for feed and water for their livestock. However, this type of pastoralist does not widely practice crop farming except under very rare circumstances. The other type of pastoralists are mobile types and have no fixed residential area as they frequently move with their family and livestock in search of feed and water for their livestock.

Livestock production is a major livelihood activity prioritized by both pastoral and agro-pastoral households in Miesso. The youth actively participate in livestock production in the district. Livestock is an important source of household income and food security (Sofia, 2010). According to OLLRP (2020) and the Miesso Woreda office of Agriculture and Natural Resources (2021), cattle and goats are the major marketable livestock commodities most dominant in the farming system, followed by camel (Table 4).

Table 4 Livestock resource base of Miesso Woreda

No	Type of Livestock	Total Population
1.	Cattle	189,861
2.	Camel	41,860
3.	Goats	97,044
4.	Sheep	42528
5.	Poultry	137,410
6.	Donkey	15,616
7.	Horse	No Data
8.	Mule	No Data
9.	Bee Colony	No Data
10.	Total	524,319

Source: Miesso Woreda office of Agriculture and Natural Resources (2021).

3.4.2. Resource mobilization and socio-economic dynamics

Two ethnic groups predominantly inhabit in Miesso Woreda: the Oromo and the Somali. The Oromos are mainly agro-pastoral, whereas the Somalis are pastoral, entirely relying on livestock. Beyene (2009) identified three important features that define the socio-economic conditions of the Woreda and how competition over limited resources may cause conflict. First, different production systems (pastoral and agro-pastoral) coexist in the same Woreda. Second, these two systems compete for land and the way it needs to be utilized. Such competition has long been resulting in inter-ethnic conflict. It is highlighted that a decline in rangeland resources manifested through the reduction in livestock feed availability has presented a challenge to sustaining the livelihoods of both groups. Grazing land for livestock production, which is considered a priority for both groups, has been constrained more by the threat of conflict than by environmental change and demographic pressure in the Woreda (Beyene, 2009). A report by the west Hararghe zone Disaster Risk Management Office (July 2019) highlighted that competition over resources triggers conflict in the Woreda and locations bordering the Somali region during drought seasons. Studies on the nature and development of recent conflicts in the Woreda showed a drastic evolution of such conflicts involving armed confrontations resulting in significant welfare loss, mass displacement and destruction of properties and infrastructures (Endris and Hassan, 2020).

4. Youth, Aspirations, and Agriculture

4.1. Defining Youth

The term “youth” has no universally accepted definition; however, the term typically applies to people under a certain age span. 'Youth' is a socially defined concept that describes the period of transition between childhood and adulthood (Barau & Afrad, 2017). According to Afande et al. (2015), youths are usually defined concerning their age brackets; and there is little agreement as to what entails the upper and lower limits. The United Nations (UN) uses the ages from 15 to 24, while the African Union Commission uses the ages of 15–35 (Lindsjö et al., 2020). The Ethiopian government uses the ages from 15-29 (FDRE Ministry of Youth, Sports and Culture, 2004). According to Barau and Afrad (2017), a youth is one in transition from childhood to adulthood. This involves all biological processes, social growth, and economic freedom.

4.2. Youth Aspiration and Agriculture

According to the Oxford dictionary, the word ‘aspiration’ refers to ‘a desire or ambition to achieve something. Aspiration is also defined as an individual's desire to obtain a status object or goal such as a particular occupation or level of education (what one hopes will happen in the years to come). The word thus signifies some aim or target and a preference or wish to attain it. The meaning also suggests, rather implicitly, that some effort must be exerted to realize the desired aim or target. Against this background, Bernard and Taffesse (2014) have argued that aspirations can have three distinctive aspects:

First, aspirations are future-oriented; that is, they are goals that can only be satisfied at some future time. Aspirations are not about immediate gratification but long-term dreams. Secondly, aspirations are motivators; that is, they are goals in which individuals are willing, in principle, to invest time, effort, or money to attain (in contrast to idle daydreams and wishes). Finally, aspirations may refer to a specific dimension of well-being, such as wealth or social recognition, but are more generally perceived as an ambition to reach a multi-

dimensional life outcome. The key implication is that aspirations can influence an individual's future-regarding behavior.

Rural youth's aspirations (CRP, 2015; Proctor & Lucchesi, 2012; Leavy & Smith, 2010) remain a relatively unexplored area for researchers (Pyburn et al, 2015; CRP, 2015; Sumberg, 2012) and are struggling to find its place in sociological or socioeconomic research. Understanding the specific context of youth is critical to developing appropriate and effective strategies and programmes. While some contend that aspirations are 'hopes and dreams that are not necessarily embedded in reality (Leavy and Smith, 2010), they may also be what people expect to achieve (MacBrayne, 1987). Measuring youth aspirations helps shed light on the possible employment outcomes that can be observed in adulthood and play a role in breaking poverty circles, which is highly relevant for public policy (Costa, Palacios-Lopez, Palacios-Lopez, 2022). Aspirations give us a better understanding of the life trajectory that young people want to have. It enables marginalized groups to exercise their 'voice' and reflect on ways to change their situation (Appadurai, 2004; Carney, 2003).

Most aspiration-related studies in SSA and Ethiopia are in the area of career development, focusing on the education sector (e.g. Schewel & Fransen, 2018) and based on urban contexts. Most of which are also based on secondary data. In general, available studies on youth aspiration in agriculture and farming are mixed.

In a longitudinal study, Leavy and Hossain (2014) studied aspirations across 23 research sites in 10 countries. The survey covered rural and urban areas. The study found that farming is not a favored option for the younger generation in rural areas. There was also a strong and widespread desire among the youth to use formal education to gain a respected profession in urban areas. The study also found that the expansion of information technologies and the corresponding desire to consume these technologies shaped youth occupational aspirations and occupational choices. The lack of interest in agriculture among many young people is due to the lack of access to land, capital and other inputs.

Daum (2018) study in Zambia revealed a mixed result on youth aspirations and agriculture. Some of the responses from the youth confirmed the growing narrative that farming is an unattractive career and provided a dark picture of agriculture. They expressed that farming is a burdensome and labour-intensive occupation with little or no reward. They perceive farming as an occupation with no guarantee of regular income. They also expressed the risk associated with farming, particularly due to overreliance on unreliable rainfall patterns. Instead of being farmers, they aspire to pursue regular paying careers such as teaching, nursing and policing. In the same study, another group of youth preferred farm life. They aspire to work and make a profitable business out of it. They plan to own draught animals and bicycles or motorbikes for transporting their farm produce to stores or markets. Whereas being very positive about farming as a source of livelihood, they mentioned that limited access to land, lack of access to agricultural finance and Information Communication Technology (ICT) are some of the challenges they are likely to face. Leavy and Smith (2010) also noted that environmental degradation; limited access to land, social and cultural practices, increasing globalization, aspirations to attain a high standard of living that agriculture cannot support and increasing awareness of rural-urban inequalities as some of the reasons that make rural youth not pursue agricultural-based livelihoods.

Schewel & Fransen (2022) studied voluntary immobility among youth in Ethiopia, India, and Vietnam for the "Young Lives Project". The authors examined the motivations of young

people who express the preference to stay put, and asks what individual and household characteristics are associated with voluntary immobility. They find that the majority of the youth surveyed envision a future within their home country, and between 32 per cent (Ethiopia) and 60 per cent (Vietnam) prefer to stay in their current location. Most young people surveyed prefer to stay for family-related reasons. Living in an urban area and engaging in farm work are associated with greater staying aspirations, but only for youth from the most resource-poor or the wealthiest households. Higher levels of schooling, wealth, feelings of self-efficacy and access to paid employment are consistently associated with diminished desires to stay, with stronger effects for youth from rural settings, resource-poor households, and women. The authors argued that the finding has important policy implications for development interventions that seek to decrease migration propensities by creating job opportunities in origin areas. Whether expanding employment will increase or decrease staying propensities depends on the nature and prospects of local employment and the socioeconomic backgrounds of young people engaging in it. For particular subsets of youth – youth from rural areas, poorer households, or young women – accessing paid work may be a stepping stone that provides the networks and financial resources needed to imagine and realize a migration project.

Also, contrary to the popular narrative that young people are constantly migrating to the cities in search of city life, Anyidoho et al. (2012) found that many youths move to work on cocoa farms. For these youth, migrating to work on cocoa farms enable them to earn a greater income than they may have in their home areas in cities. These youth aspire to pursue farming as a career under better conditions than they were under; they hope to purchase or lease land. In this study, some youth were depending on cocoa farming to provide them with the initial capital to propel them into more appealing alternative sources of livelihoods. A similar observation was made among tomato youth farmers in Brong Ahafo in Ghana too (Sumberg and Okali, 2006). The pressure on land was the major factor driving them out of cocoa farming. The young people further stated that investment in inputs and technologies, high prices, enhanced access to credit services and investments on measures that are tailored to improve living conditions in rural areas would make them consider cocoa farming as a long-term occupation. These findings suggest that rural youth outmigration does not necessarily reflect a permanent, lifetime abandonment of rural life, agriculture or the possibility of a return to farming (White, 2018, 2019, 2015).

Giuliani et al (2017) using a combination of qualitative and quantitative participatory research methods studied rural youth's realities, perspectives, and aspirations in dryland Agricultural Livelihood Systems (ALSs) in the Midelt Province, Morocco. The study evaluated young people's perception of pastoral, rain-fed and irrigated systems of agriculture and uncovered gender differences in the participation of young people in agricultural activities. The study showed the youth's dream village is envisioned as a rural place where people have a more comfortable life with their own families, farming better and more sustainably rather than seeking a job in urban areas. A greater proportion of young men were highly involved in agricultural activities than their female counterparts. Young women involved in the irrigated and pastoral system and both genders involved in rain-fed farming had a very negative perception of agriculture. Nevertheless, about two-thirds of young men aspire to stay engaged in irrigated agriculture provided the current terms are improved.

A recent study by Endris & Hassan (2019) across four dryland districts in Oromia and the Amhara Regional States of Ethiopia found that youth aspirations are driven by a common goal to improve one's income, family, and quality of life. Such aspirations are shaped by

social, cultural, environmental, and political realities and exposure to social media. Aspirations are also gendered. Social and cultural norms and the gendered division of labour, and the expectations of family and community shape the aspirations of male and female youth. In all cases, agriculture and working in agriculture were found to be the major aspirations of the youth. Another study by Boonabaana et al (2019) using qualitative research design, compared youth aspiration and transitions across three dryland regions of Uganda: North, Northeast and Eastern Regions in Uganda. The following were key findings of the study: i) both female and male youth across the three areas aspire to have progressive and better lives, mostly getting themselves out of poverty; ii) common aspirations include better education, housing, becoming community role models, agricultural aspirations, and for male youth in Karamoja, marriage and children are key; iii) youth aspirations were conditioned by local experiences, access to resources and other opportunities, as well as by role models in their communities. In addition, female and male aspirations remain largely unmet due to a myriad of challenges that have resulted in missed opportunities and shattered dreams.

A common finding across the above studies are: that agriculture has been held as a common aspiration of the youth across the study countries. For instance, more than half (over 55 %) of the respondents from Morocco, Ethiopia and Uganda have agriculture as their common aspirations. Living in urban areas has been the view of the minority. Even those aspiring to go abroad finally aim to go back to their rural areas and start farming. Youth aspire for a good life and education.

Common reasons for unrealized aspirations include lack of money (Costa, Palacios-Lopez, Palacios-Lopez, 2022), the difficulty in accessing governmental and other agencies support. Youth are unable to tap into supporting programmes because they are not organized into associations or economic interest groups (e.g. Giuliani et al (2017) or because they don't have collateral to be eligible for getting credit access (Boonabaana et al, 2019; Boonabaana et al (2019).

Common recommendations made include infrastructural and regulatory interventions and specific training in agricultural practices targeting and engaging youth; availability of youth-friendly credit and saving; agripreneurship (entrepreneurship in agriculture). training and business startups; ensure availability of locally adapted and gender-responsive rural finance. Making agriculture more appealing to young people with the right kinds of measures and support” (Leavy and Hossain, 2014).

5. Enabling Environment and Challenges for Youth Livelihood Transformation

Support structures are key to enhancing youth livelihood opportunities in pastoral and agro-pastoral areas. The various elements that can assist the agro-ecological transition of the youth can be categorized as policy, physical (financial and market infrastructure, educational, transportation, etc), socio-cultural (social capital and customary institutions), organisational infrastructures (saving and credit associations, extension services, healthcare), and local actors and networks. The next section provides a review of the basic services and facilities of Miesso woreda with implications for youth transformation.

5.1. Youth-friendly policies and rural land proclamations

The 2004 Ethiopian National Youth Policy Document highlights the importance of creating favorable conditions to enable the youth to create new jobs for themselves based on their competence and to benefit from them (Ministry of Youth, Sports and Culture, 2004). The phrase “supporting condition” could mean any type of support the youth may require in realizing their aspirations. For the rural youth, land is one of the key assets to support the successful agro-ecological transition. The FDRE Rural Land Administration and Land Use Proclamation (456/2005) recognizes the right of any person who is a member of a peasant farmer, semi pastoralist and pastoralist family having the right to use rural land may get rural land from his family by donation, inheritance or from the competent authority. The proclamation specifically underscores the right of women and youth to acquire and use agricultural land stating that “any citizen of the country who is 18 years of age or above and wants to engage in agriculture for a living shall have the right to use rural land”. The proclamation also recognizes the right of women who want to engage in agriculture to get and use rural land.

A recent study conducted by Endris and Hassan (2019) in Mieso woreda shows that as land is getting scarcer and fragmented the youth face significant barriers in acquiring land either through government channels or inheritance. As a result, the youth take alternative measures of accessing land such as clearing forest land and turning it into agricultural land (e.g., in the Hochecha Forest). Such measures are contrary to the main aim of the Proclamation which is to conserve and develop natural resources in rural areas by promoting sustainable land use practices. Supporting youth participation in off/non-farm activities should be taken as a strategic direction by the local and federal government.

5.2. Infrastructure facilities and institutions

5.2.1. Transportation facilities

Access to basic road networks and transportation are key to enhancing rural youth engagement in agricultural production and marketing along the value chain. However, access to roads which is a major factor for market access is very poor in Mieso woreda; and 72.6 % of households live in areas either with dirt roads that are difficult for cars or with no road at all (Woreda Disaster Risk Profiling Programme, no date). According to a report by the Oromia Low-land Resilience Project (OLLRP), the roads in the zone/Woreda are classified as gravel roads, URRAP Roads, and Community roads. In general, there are about 89 all-weather roads in the district. All peasant associations have seasonal roads. In 2009, the total length of asphalt and gravel roads connecting the Woreda with the zonal capital and different kebeles was more than 90 km. However, most of the existing road services are poor (OLLRP, 2020). During the rainy season, the mobility of people and goods, and services is very limited.

5.2.2. Education

Promoting access to education in pastoral and agro-pastoral areas is viewed as an important pathway for successful youth engagement in agriculture and rural non-/off-farm businesses. Mieso Woreda has 53 schools (Figure 10). However, schools are not evenly distributed across the various kebeles. The literacy level of the woreda is also reported to be very low. According to a report by Oromia Disaster Risk Profiling (no date), of those school-age

children 64.5% of them did not go to school at all and in terms of general awareness 87.6% of members of households cannot read and write.

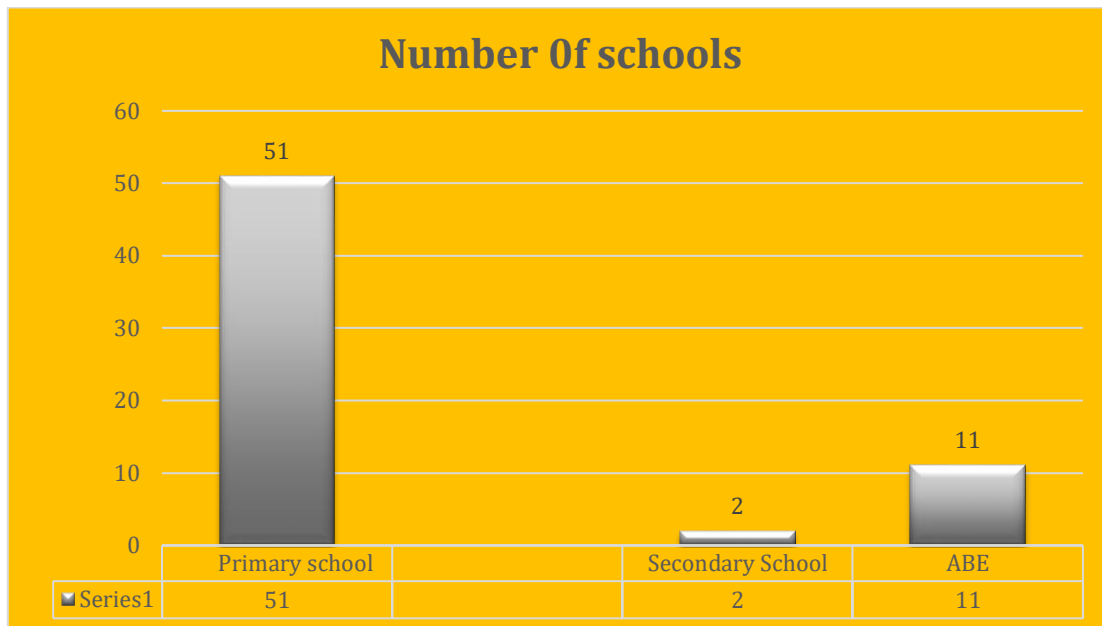


Figure 6 Number of schools in Miesso Woreda in 2021.

Source: Miesso Woreda Education Bureau, 2021.

In general, in terms of school enrollment, there were about 29,888 students enrolled to attend school at different levels in 2021 (Figure 7). As depicted by the above figure, the rate of gender disparity in education is significant in the Woreda at all levels of schooling. Female students account for the minimum enrollment across all levels. Such an enrollment gap even grows bigger as we go to the higher levels of schooling. Cultural factors (perception about modern education for girls, early marriage, household chores) and distance from school are some of the major factors cited as barriers for the low enrollment of girls, among others (Endris and Hassan, 2019).



Figure 7 Students school enrollment in 2021 in Miesso Woreda disaggregated by sex.

Source: Miesso Woreda Education Office (2021)

Most of the schools also lack the necessary resources and materials to support proper teaching-learning activities. According to Miesso Woreda Education Office (2021), there is a critical shortage of classrooms, reference materials, laboratory facilities, tables, and chairs across all schools in the district. Most of the schools also do not have an adequate water supply. For instance, out of 53 schools found in the Woreda, more than 68% of them do not have access to water supply in their compounds. There is also a critical shortage of teachers at all levels of schooling. This can be demonstrated by the student-teacher ratio (Table 5). The student-teacher ratio at pre-primary and primary levels are 216:1 and 56:1, respectively.

Table 5 Student-teacher ratio of Miesso Woreda by the year 2021

Pre-Primary			Primary school				Secondary school				
M	F	T	Student: Teacher Ratio	M	F	T	Student: Teacher Ratio	M	F	T	Student: Teacher Ratio
16	4	2	216:1	31	18	49	56:1	7	1	8	30:1
		0		9	0	9		0	4	4	

Source: Miesso Woreda Education Office (2021)

All these are evidence suggesting that the education infrastructure in the woreda requires significant improvement. Cultural barriers and perceptions against girls’ education are also equally important loopholes that should be addressed.

5.2.3. Human and Livestock Healthcare services

Access to adequate and quality human and livestock health care services is one of the core elements to promote sustainable investment by the male and female youth in pastoral and agro-pastoral areas. Miesso woreda has very limited healthcare facilities. Official reports show that there are only 26 healthcare facilities currently providing healthcare services for human and animal health for the entire Miesso (1 hospital, 3 health centers, 12 private clinics for humans and 11 animal health clinics). This is way too small as compared to the population size and prevalence of human and livestock diseases in the woreda. It is thus important to improve the provision of healthcare services in the woreda. The availability of such infrastructures is associated with improved willingness of the youth to stay and work in the rural areas.

5.2.4. Agricultural Extension services

The youth play a very important role in agriculture in Miesso woreda. The inclusion of young male and female farmers in agricultural extension programs is considered key to achieving sustainable food and nutrition security. Ethiopia's strategy for the agricultural extension system also recognizes the mainstreaming of gender and youth as one of the 9 pillar strategies to achieve food and nutrition security and poverty reduction goals of the country. However, similar to other parts of the country, agricultural extension service provision in Miesso woreda suffers from organizational, structural, and capacity-related problems affecting proper service delivery. Studies show that agricultural extension services are poorly organized and staffed in the Woreda (Endris and Hassan, 2019). According to Miesso Woreda Office of Agriculture and Natural Resources (2021) there are only 121 development agents (Figure 8) and 16 FTCs for the entire Miesso district.

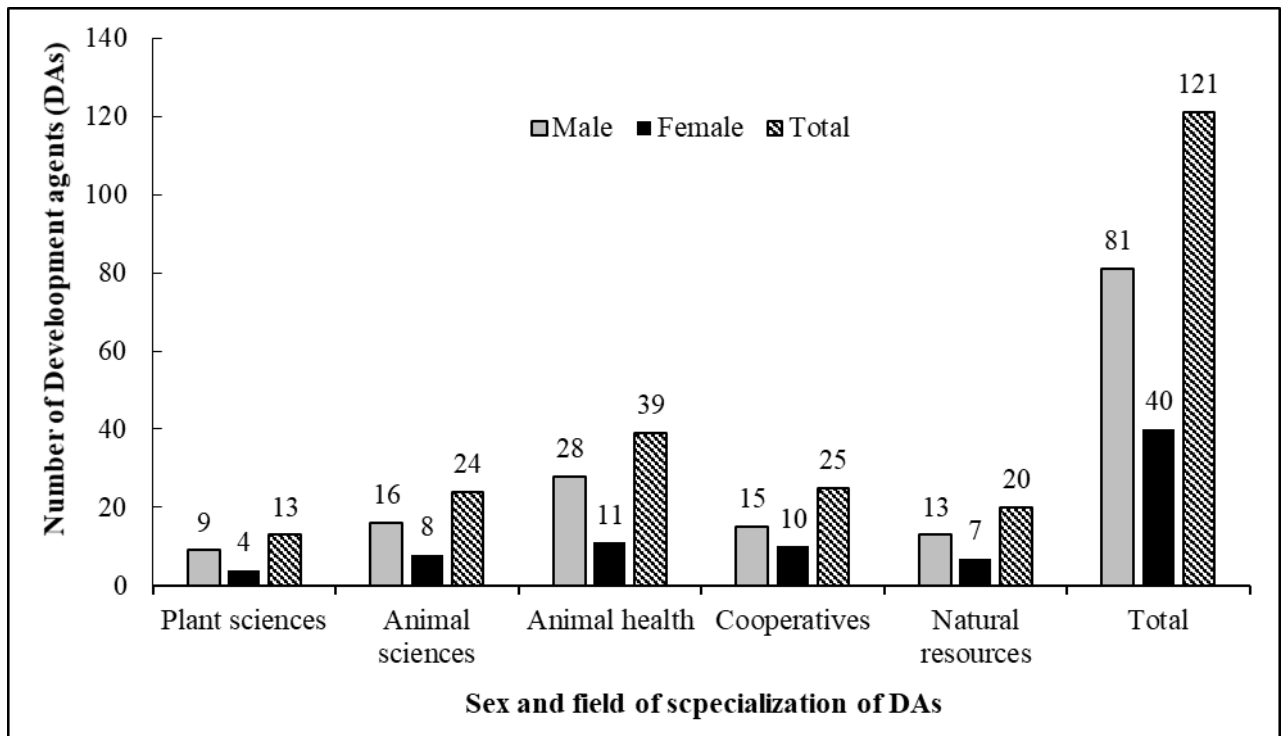


Figure 8 Number of DAs in Miesso Woreda

Source: Miesso Woreda Office of Agriculture and Natural Resources, 2021

A related problem with the extension service in Miesso Woreda is low motivation and high mobility/turnover of DAs. Several Subject Matter Specialists (SMSs) and DAs in the Woreda quit the extension service and joined better-paying NGOs or other government offices (Gebremedhin et al., 2006). This is due to the poor incentive packages and remoteness of most of the kebeles from urban centres.

5.2.5. Water services

River or stream water sources are the most important sources of water for the majority of households in Miesso woreda (Woreda Disaster Risk-profiling Programme, no date). About 53,854 people are currently facing critical water shortages in the woreda (Multi-agency need assessment report, 2021). Studies show that the lack of clean water supply in lowland areas such as Miesso is one of the push factors triggering youth migration to urban centers. The problem affects the daily life of male and female youth and how basic public services can be provided in multiple pathways. For instance, quite a large number of schools in the Zone and woreda are without access to water. Reports show that nearly 34 schools in the woreda have no access to water causing 14,693 young girls and boys to drop out of school (multi-agency need assessment report, 2021). The same report has indicated that the operation of school feeding programs is interrupted in most of the schools due to a shortage of water for preparing food. Similarly, most health facilities based in the woreda are not functioning efficiently due to the recurring water shortages. The lack and/or unavailability of piped-water supply by the community often forces households to march longer distances and spend a long time looking for water. A recent study in Miesso woreda shows that the impact of such events is gendered and affects male and female youth differently (Endris and Hassan, 2020). As women and younger girls are traditionally responsible for fetching water for the entire

household, younger girls may likely drop out of school for fetching water. For instance, the average time taken to fetch water in Miesso woreda is reported to be 203.18 minutes/day (Woreda Disaster Risk-profiling Programme, no date).

In terms of household access to water for irrigation, small-scale irrigation is one of the least developed infrastructures in Miesso Woreda. There were 11 small-scale irrigation schemes in the entire Woreda (11 kebeles) in 2018 (Miesso Woreda Office of Agriculture and Natural Resources, 2021). The irrigations rely on a surface (on Laga Chiro and Kora River) and groundwater (Table 18).

Table 6 Small scale irrigation schemes and estimated beneficiaries

Kebeles with Irrigation	No of Schemes	Irrigated area in hectare	Potential area in hectares	Water Sources	Estimated Beneficiary HHs		
					M	F	Total
11	11	520	855	Surface (Laga Chiro and Kora River) and Groundwater	598	117	715

Source: Miesso Woreda Office of Agriculture and Natural Resources (2021).

All these scenarios show the severity of water-related problems in the locality. Such environmental stressors can reinforce male and female youth to migrate to urban areas and give up on their dreams. As youth-focused interventions depend on the development of improved infrastructure such as water (both for drinking and irrigation), the problem requires coordinated action by the concerned organizations.

5.3. Market context

Studies show that Miesso Woreda provides a strategic livestock market for traders (Beyene, 2009) from different locations. However, the production and marketing of livestock products are hampered by limited access to the modern livestock and product market infrastructure. According to Miesso Woreda Office of Agriculture and Natural Resources (2021) there are only two marketplaces in the entire Woreda (Miesso and Asebot towns). Asebot town serves as the only livestock marketplace concerning cattle sales in the Woreda (OLLRP, 2020). The main buyers of the livestock (fattened cattle) are traders from Addis Ababa and those from the surrounding areas.

Regarding marketable crop types, the common types of crops grown and sold at the local market include maize, sesame, groundnut, haricot bean, khat, sesame, mung bean, and tuber crops (sweet potato). However, there is a lack of market for agricultural products in the locality, including standard market centers, marketing cooperatives, and associations. The youth have limited engagement and participation in agricultural marketing and lack access to real-time market information.

5.4. Financial institutions

The availability of a locally adaptable and affordable rural finance system is key to improving the agricultural productivity and food security of smallholder farmers. Such infrastructures are also important to support rural entrepreneurship by male and female youth farmers.

According to reports from West Hararghe Zone Micro and Small Enterprises Development Office (2016) and empirical studies, rural financing arrangements are lacking. Farmers would also find it difficult to make use of the existing financial arrangements due to structural barriers. Long time loan process and bureaucracy, the requirement of a large amount of advance savings, short-term loan repayment period, collateral and high-interest rate, and lack of interest-free credit are key challenges in accessing rural credit by male and female youth in Western Hararghe Zone in general and Miesso Woreda (Endris and Hassan, 2020).

5.5. Local actors and networks to enable youth transition.

Some of the local actors and potential groups that can support key transformation/agroecological transition of smallholder farmers and the youth in Miesso Woreda/West Hararghe zone identified by Endris and Hassan (2020) and Oromia Low-land Resilience Project (OLLRP) includes the following:

5.5.1. Climate change actors

The youth in Miesso Woreda have limited access to information, technical support and financing for responding to climate change-induced shocks. Enhancing the capacity of women and youth to cope with and adapt to the impact of climate variability and change for improved resilience requires integration between key climate change actors and stakeholders (Gebremedhin et al., 2006). Potential climate change actors include zonal regional bureaus of agriculture, credit and saving office, zonal disaster preparedness agencies, agricultural extension workers and NGOs.

5.5.2. Market actors

The market for agricultural products and livestock is very limited in Miesso Woreda (Beyene, 2016). Key transformation agencies that can create opportunities for male and female youth along with the crop and livestock value chain may include producers, marketing cooperatives, financial service providers, rural saving and credit associations, and agricultural extension workers.

5.5.3. Agricultural Extension and Advisory service actors

Agricultural extension service in Miesso, the same as the rest of the country, is provided through the formal government channel. Woreda's office of Agriculture and Natural Resources is the major provider of agricultural extension services. Agricultural colleges (including universities and research centers such as Oda Bultum University, Haramya University), farmers' training centers and ATVETs have been identified as key stakeholders.

5.5.4. Health service actors

Proper health care (human/livestock) delivery is one of the strategic directions to improve household welfare in pastoral and agro-pastoral areas in Ethiopia. The provision of state-of-the-art human/veterinary health care services through strengthening animal/human health extension systems and building the capacity of healthcare providers is considered very important. Some of the key actors identified to facilitate such transitions in Miesso Woreda include development agents, animal/human health extension workers, veterinarians, NGOs working in the area of livestock health, and higher education institutions.

5.5.5. Organizations operating in Miesso

Various non-government and government organizations operate in the district to address pertinent socio-economic and production-related problems of the community in Miesso woreda. A list of projects and interventions, operating under NGOs/GOs identified and examined the extent to which youth and women are included as direct and indirect beneficiaries. Table 7 below presents the list of organizations, types, the specific project implemented, and target groups/beneficiaries.

Table 7 Active NGO Projects for FY 2009/2010E.C in West Hararghe Zone and youth inclusion

Name of NGOs	Project title	Objectives	Status	Target groups
CARE	Growing Nutrition for Mothers and Children project		On-going	-Mothers and children
	Emergency WASH and cash intervention for drought and conflict affected communities of East and West Hararghe zones, Oromia region of Ethiopia – ETH926 Budget: € 830.000,00	<p>To reduce the impact of drought on affected local and conflict displaced communities through gender sensitive WASH and cash support.</p> <p>Expected Results ER 1: Improved access to safe drinking water and improved hygiene practices through quick rehabilitation/construction of water schemes and hygiene promotion.</p> <p>ER 2: Livelihood opportunities of targeted HHs increased through conditional and unconditional cash transfers.</p>	Duration: 01.12.2017 – 31.10.2018	Households IDP
	Strengthen PSNP4 Institutions and Resilience (SPIR) Budget: US\$ 44,937,915	<p>Strengthen PSNP4 Institutions and Resilience focusing on enhancing livelihoods, increase resilience to shocks, and improve food security and nutrition for rural households vulnerable to food insecurity in Ethiopia.</p> <p>Increased income, productive assets and equitable access to nutritious food for vulnerable women, men and youth;</p> <p>Improved nutritional status of children under two years of age, pregnant and lactating women, and adolescent girls;</p> <p>Increased women's empowerment, youth empowerment and gender equity;</p> <p>Strengthened ability of women, men and communities to mitigate, adapt to and recover from human-caused and natural shocks and stresses.</p>	September 30, 2016 to September 29, 2021	<ul style="list-style-type: none"> - Vulnerable rural hhs - Vulnerable women - Vulnerable Men - Youth - Lactating women - Pregnant women - Children Under 2 - Adolescent girls

CISP	Emergency Initiative for Vulnerable Populations, Refugees, Displaced Persons and Migrants to Counter the Causes of Irregular Migration in Ethiopia” (AID 10677) Oromia, West Hararghe (Habro, Daro Labu and Mieso Woredas) and Bale (Sinana, Robe and Goba Woreda) for a total of 80,072 direct beneficiaries and 580,000 indirect beneficiaries. TOTAL BUDGET: 2,000,000 euro.	Address the root causes of irregular migration by improving the living conditions of the population in areas with high migration potential, returning migrants, and host communities. The fight against irregular migration (General Objective) has been articulated through direct actions, aimed at promoting local development, creating new job opportunities, improving access to basic services, including through a massive awareness campaign on the risks related to irregular migration (Specific Objective).	Twelve Months (2016-17)	Involved mainly women (50%) Youth ages 18 and 35 (70%), Returnees (30%) and potential migrants
	WASH		On-going	Male and female youth
CATCH	International NGO working on Agriculture.		On-going	
CRS	Development Food Security Activity- (DFSA) - AID-FFP-A-16-00005 With the overall target of 240,625 Productive Safety Net Program (PSNP) IV beneficiaries, local Government of Ethiopia (GoE), community and HH capacity development was complemented with more community-led support to address gaps in GoE’s services and capacity.	PURPOSES: P1: to reduce communities’ and households’ vulnerability to shocks P2: Improving Sustainable Economic Well-being for households. (ESTABLISHING women and youth friendly on farm and off-farm income generating enterprises; gainful employment for the youth; entrepreneurship training for youth with skills to start their own businesses; Rural women and youth ability to make meaningful decisions and choices for their lives; Women and youth trained in and received coaching on improved leadership, negotiation and life skills;)	September 30, 2016- September 29, 2021	PSNP IV Youth and women – indirect beneficiaries through inclusion of gender and youth strategies

ECC-SDCCOH - Ethiopian Catholic Church- Social Development Coordinating Office of Harar	Emergency Response in Miesso Wereda		On- going	
	Resilience Through Enhanced Adaptation Action Learning and Partnership (REAAP)		On- going	Children and women
Mothers and Children Multi- sectoral Development Organization (MCMDO)	Reproductive, Maternal and Neonatal, Child and Adolescent Health for Pastoralists in Hard-to-reach Environment		On- going	Mothers and children
NDRMC	Government project working on disaster prevention			
LLRP	<p>LLRP - Ethiopian Government, WB & IFAD</p> <p>To Improve Livelihood Resilience of Pastoral and Agro-Pastoral Communities in Ethiopia. The key indicators towards this objective include:</p> <ul style="list-style-type: none"> - Farmers reached with agricultural assets or services (disaggregated by gender); - Percentage increase in yield of selected crop and livestock commodities; - Increased land area (in ha) under sustainable landscape management practices; - Number of people with improved access to social services (disaggregated by service type and gender); 			<p>women(50% beneficiaries) and youth (30% beneficiaries).</p>

	<p>Four components:</p> <p>Component 1: Integrated Rangeland Development and management:</p> <p>Component 2: Livelihood Improvement and Diversification:</p> <p>Component 3: Improving Basic Services and Capacity Building:</p> <p>Component 4: Project Management, Monitoring and evaluation</p>			
Pastoral Community Development Project (PCDP) III	<p>The aim of this project is to support community sub-projects in targeted pastoral and agro-pastoral sub-districts to build demand-driven social and economic infrastructure, to build community institutions, to develop a community level monitoring and learning system, and to assist pastoralist/agro-pastoralist households to improve their livelihood by promoting access to financial services and supporting improved advisory services. The project benefits approximately 2,6 million pastoralists</p> <p>Total Project Cost US\$ 254.15 million</p> <p>IFAD Financing US\$ 128.94 million</p> <p>Co-financiers (International) World Bank: International Development Association US\$ 110.01 million</p> <p>Co-financiers (Domestic) Beneficiaries US\$ 14.2 million</p>		Duration 2013 - 2019	Youth and women targeted as indirect beneficiaries

Source: Oromia Regional Socio-economic profile and GIS Directorate (2018) and OCHA Ethiopia (2019)

As indicated in Table 7, youth and women are targeted as indirect direct beneficiaries across several programs and project interventions across West Hararghe zone.

Project performance reports for some of the projects assessed show that participation and women and youth were constrained by various factors. For instance, youth membership in Savings Internal Lending Communities (SILC) under the DFSA project was lower than anticipated due to limited access to income and social capital which need continuous education by the project. Project implementations were also delayed by sporadic instability in some of the fragile locations. Busy schedules of government workers and the high turnover of Health Extension Workers (HEWs) caused delays in conducting various pieces of training.

5.6. Social and cultural landscape (indigenous institutions)

Cooperation and social support networks that respond to social needs and promote household and community wellbeing to shocks have been institutionalized and widely practiced among rural households in Ethiopia for many centuries (Endris et al. 2020; 2018). Similar to other communities in Ethiopia, pastoral and agro-pastoral communities in Hararghe have a system of indigenous mutual support practices (IMSPs) and social networks to support each other in times of good and bad. Socio-cultural studies in the past have underscored the role of indigenous/customary institutions in supporting socio-economic transitions of communities in Eastern Ethiopia, including the West Harareghe zone. Studies show that customary institutions in Miesso have a role in resource-based conflict management, sustainable land management, and water resource management for sustainability. Beyene (2016) underscores that the effect of state interventions in providing training, improved seeds and land management technologies in Miesso Woreda will be unsustainable without considering the role of customary authorities. Some of the key customary institutions include; Aba Gadaa (Daaminaa) (creating peace between rivals, ordering and coordinating security); Aba Malaaaqaa (Father of Water) (coordinating and facilitating equitable water resource use); Abbaa Saalfaa/father of grazing (coordinating and facilitating fair use and distribution of grazing land) (OLLRP, 2021).

Other than the political structure that governs resource utilization at the community level, there are also other types of arrangements that facilitate resource access and reciprocities between individuals and households for coping against adverse shocks. These practices are opportunities for the youth to engage in farming and other activities in the drylands. The various practices offer services, such as mutual insurance, labour sharing, savings, and credit to rural households, among other obligations (Endris et al. 2018). Some of the customary arrangements are Hirta (s an alternative way of accessing land through sharecropping or contract farming among the youth and others); Guza (labor sharing); Afosha; women's association (Endris et al. 2018; Endris and Hassan, 2019).

6. Challenges that hinder successful youth transition

Pastoral and agro-pastoral youth face structural and policy challenges that hinder a successful transition and find gainful employment opportunities in rural areas. According to Endris and Hassan (2020) the major challenges the youth in Miesso woreda face can be structured around eight major categories: 1) local customs and norms, 2) financial, 3) education and technical capacity, 4) infrastructure and market, 5) economic, 6) administration and policy related, 7) environmental, and 8) others (Table 8).

Table 8 Major challenges affecting successful youth livelihood transformation.

Category of core challenges	Description
Financial	<ul style="list-style-type: none"> - Limited startup capital to start off/none-farm businesses - Lack of collateral to access credit - Lack of Shari'a-compliant (interest free) credit service
Local customs and norms	<ul style="list-style-type: none"> - Domestic drudgeries/workload on women and younger girls - Land inheritance that excludes women - Early marriage
Education and technical capacity	<ul style="list-style-type: none"> - Limited skill regarding use and application of agricultural technologies - No business skill
Infrastructure and market	<ul style="list-style-type: none"> - Lack of tailor-made agricultural extension program for the youth and women farmers - Limited access to product and input market Limited access to human and animal health services - Limited access to water and electricity network (a push condition for urban migration) - Limited access to junior and secondary education (a push factor for early marriage) - Untimely delivery of agricultural inputs - No recreational facilities (a push factor for urban migration) - Poor road network and transportation
Administration and Policy	<ul style="list-style-type: none"> - Internal displacement and migration - Landlessness - Resource based conflict (with neighboring Isa tribe)
Environmental	<ul style="list-style-type: none"> - Erratic Rainfall - Drought and hunger (food shortage) - Pest and diseases for crops and animal - Property looting and theft (during conflict) - Very limited pasture for livestock
Others	<ul style="list-style-type: none"> - Addiction to Khat (source of despair and depression on the youth)

Source: Endris and Hassan (2019)

Some of these challenges are gendered and may affect male and female youth differently, suggesting the implementation of gender-specific interventions and programs. Addressing the underlying causes that hinder youth engagement in agriculture is key to enhancing youth employability and achieving food and nutrition security and poverty reduction in pastoral and agro-pastoral areas. Recommendations on how to facilitate youth engagement may include: adopting context-specific approaches to understanding youth, addressing gender-based discrimination in access to resources, ensuring availability of locally adapted and gender-responsive rural finance, streamlining bureaucratic rules, training the youth as value chain actors and rural service providers, create market links, provide the rural infrastructure that can support youth engagement in agriculture, promote the production of high value, early maturing, drought-resilient and disease-resistant crop varieties (Endris and Hassan, 2019).

7. General conclusion and recommendations

From the literature reviewed, it is found that male and female youth have varying aspirations and dreams. The most commonly cited aspirations of rural youth include a plan to own draught animals, bicycles, or motorbikes for transporting their farm produce to stores or markets; education, and a career in urban areas. Some of the youths have also envisioned a more comfortable life with their own families, farming better and more sustainably rather than seeking a job in urban areas. These aspirations are shaped by their own personal experiences, gender, local context, access to media, and role models.

From the literature reviewed, we found that youth aspiration and willingness to participate in farming and agriculture is on the decline. There is an increasing dissatisfaction among rural male and female youth to engage and work in agriculture and rural areas. Among others, some of the reasons that make rural youth not pursue agricultural-based careers include environmental degradation, limited access to land, and growing rural-urban inequalities.

The study showed that in West Hararghe, the agropastoral/pastoral youth operate in a very complex and harsh environment and face multiple challenges at different levels, constraining their successful transition to adulthood. Pastoral and agro-pastoral youth face structural and policy challenges that hinder a successful transition and find gainful employment opportunities in rural areas. The major challenges the youth face can be structured around eight major categories: 1) local customs and norms, 2) financial, 3) education and technical capacity, 4) infrastructure and market, 5) economic, 6) administration and policy related 7) environmental, and 8) others. Some of these challenges are gendered and may affect male and female youth differently, suggesting the implementation of gender-specific interventions and programs.

The study's result from the institutional analysis shows that though the youth are included as direct and indirect beneficiaries in programs and interventions, they are not the primary targets (beneficiaries) of most interventions implemented in their localities. Besides, the participation of women and youth are often constrained by limited access to social capital, suggesting the implementation of proper beneficiary targeting by involving community members.

Not everything about the youth and rural areas is gloomy. Pastoral and agropastoral areas are also blessed with diverse natural, environmental, ecological, cultural and economic resources. There are also opportunities to support youth agro-ecological transition in the study areas. Opportunities that can be mobilized and tapped to promote successful agroecological transition and ensure food security in the study locations include : (1) cooperation and social support networks, (2) natural resources, (3) the potential of agroecology for livestock production, and (4) strategic market locations for livestock.

General recommendations to increase youth engagement in agriculture in pastoral and agro-pastoral areas may include: (1) designing infrastructural and regulatory interventions and specific training in agricultural practices targeting and engaging youth, (2) increasing the availability of youth-friendly credit and saving, (3) supporting agripreneurship training and business startups, and ensuring availability of locally adapted and gender-responsive rural finance. Making agriculture more appealing to young people is possible with the right kinds of measures and support.

The following are some of the specific recommendations:

Recommendation 1: Consider the vast complexities and the context in which the agro-pastoral/pastoral youth operate. Youth problems are complex. Strategies to address youth issues by government and policy makers should consider the vast complexities and the context in which the agro-pastoral/pastoral youth operate. It is also important to consider internal dynamics between and among the youth groups. As such, the appropriate development pathway and livelihood strategies for the youth should reflect its particular characteristics and the level of transformation within the country's economy. The choice should depend on the type of constraints the youth face, and their aspirations, and targeting them should be based on the proper definition of youth.

Recommendation 2: Recognize local social capital practices and networks for youth livelihood transformation. Pastoral and agro-pastoral communities have expansive social and cultural resources such as social capital and networks that offer different services, such as mutual insurance, labour sharing, savings and credit to rural households, to facilitate a meaningful transformation of the youth in the agro-pastoral/pastoral areas. To this end, greater efforts must be undertaken by development partners (such as USAID) and policymakers to recognize the role of social capital and to improve grass-root social capital and community-based mutual support groups for rural youth livelihood transformation. Part of the efforts may include designing a tailor-made program and more socially inclusive, participatory community development projects that can cut across several clans and tribal divides within and across villages.

Recommendation 3: Stimulate and support youth agripreneurship and the development of off-farming businesses. Promoting youth employment for livelihood transformation requires investment in agripreneurship development. In this regard, project interventions led by the Ministry of Entrepreneurship should consider supporting youth entrepreneurship development and support may also include training for appropriate business selection, technical training, financial support, etc. In addition, such efforts should be supported by the development of a culturally sensitive and youth-friendly financial system such as interest-free finance. The National Ministries of Gender, Labour and Social Development can serve as a key partner in ensuring that programmes are gender-responsive and leave no one behind by facilitating gender awareness and collaborations to reduce social gender inequalities.

Recommendation 4: Promote an inclusive extension system for the youth livelihood transformation. The study showed that agricultural extension was not accessible to male and female youth. Agricultural extension service is often provided at the household level by mainly targeting the male household head. Thus, the Ministry of Agriculture and Natural Resources should design a tailor-made extension system that targets both male and female youth and enforce its implementation by district bureaus of agriculture in pastoral and agro-pastoral areas. This approach is also in line with Ethiopia's strategy for the agricultural extension system which recognizes the mainstreaming of gender and youth as one of the pillar strategies to support livelihood transformation.

Recommendation 5: Conduct primary studies on rural youth to inform inclusive policies and strategies targeting pastoral youth in fragile and conflict-prone ecosystems. Strategies designed to promote youth inclusion and employment in pastoral and agro-pastoral areas in Ethiopia are almost exclusively based on secondary reviews, most of which are based on the context of urban youth. More studies, based on primary data (using a qualitative design), are

required to generate an improved understanding of the situation of youth in agro-pastoral or pastoral areas, their aspirations, and opportunity structures. In this regard, national research institutions and universities should provide technical backstopping and conduct local and regional research.

References

- Afande, F. O., Maina, W. N., & Maina, M. P. (2015). Youth engagement in agriculture in Kenya: Challenges and prospects. *Journal of Culture, Society and Development*, 71, 4–19. <https://www.iiste.org/>
- Anyidoho, N. A., Leavy, J., & Asenso-Okyere, K. (2012). Perceptions and aspirations: a case study of young people in Ghana's cocoa sector. *IDS bulletin*, 43(6), 20-32.
- Appadurai, A. (2004). The capacity to aspire: Culture and the terms of recognition - GSDRC. In *Culture and public action*, ed. V. Rao and M. Walton, 59–84. Palo Alto: Stanford University Press. Carney, 2003
- Arslan, A., David L. Tschirley, Constanza Di Nucci & Paul Winters (2021) Youth Inclusion in Rural Transformation, *The Journal of Development Studies*, 57:4, 537-543, DOI: 10.1080/00220388.2020.1808199
- Barau, A. A., & Afrad, M. S. I. (2017). An overview of social media use in agricultural extension service delivery. *Journal of Agricultural Informatics*, 8(3), 50–61. <https://doi.org/10.17700/jai.2017.8.3.395>.
- Befikadu, E., Belay, S., Tefer, E., Ongoma, V., & Tefera, N. (2019). Climate Variability and Farmers' Perception in Southern Ethiopia. *Advances in Meteorology*, ID:7341465.
- Bernard, T and Taffesse, Alemayehu Seyoum (2014). Aspirations: An Approach to Measurement with Validation Using Ethiopian Data. *Journal of African Economies*, 23 (2), 189–224, <https://doi.org/10.1093/jae/ejt030>
- Beyene, F. (2016). Land use change and determinants of land management: Experience of pastoral and agro-pastoral herders in eastern Ethiopia. *Journal of Arid Environments*, 125, 56-63.
- Beyene, F., 2009. Property rights conflict, customary institutions and the state: the case of agro-pastoralists in Mieso district, eastern Ethiopia. *J. Mod. Afr. Stud.* 47 (2), 213e239
- Bezu S and Holden S. (2014). Are rural youth in Ethiopia abandoning agriculture? *World Development* 64: 259–272.
- Boonabaana B, Musiimenta P, Mangheni MN and Ankunda JB. (2020). Youth Realities, Aspirations, Transitions to Adulthood and Opportunity Structures in Uganda's Dryland Areas. Report submitted to ICRISAT.
- Costa, V., Contreras Gonzalez, I. M., & Palacios-Lopez, A. (2022). What Do You Want to Be?.
- CRP on Dryland Systems. Youth Strategy. 2015. Available online: <http://drylandsystems.cgiar.org/sites/default/files/YouthStrategy.pdf>

- Daum, T (2018). Of bulls and bulbs: Aspirations and perceptions of rural youth in Zambia. ZEF Working Paper Series (working paper 171), ISSN 1864-6638. Center for Development Research, University of Bonn: https://research4agrinnovation.org/wp-content/uploads/2018/07/ZEF_WP_171.pdf
- Endris GS and Hassan JY. (2020). Youth realities, aspirations, transitions to adulthood and opportunity structures in the drylands of Ethiopia. Report submitted to ICRISAT
- Gebremedhin, Berhanu, Hoekstra D and Azage Tegegne. 2006. Commercialization of Ethiopian agriculture: Extension service from input supplier to knowledge broker and facilitator. IPMS (Improving Productivity and Market Success) of Ethiopian Farmers Project Working Paper 1. ILRI (International Livestock Research Institute), Nairobi, Kenya. 36 pp.
- Getnet, T., & Asrat, A. G. (2014). Becoming a young farmer in Ethiopia: processes and challenges. Working Paper-Future Agricultures, (83).
- Giuliani A, Mengel S, Paisley C, Perkins N, Flink I, Oliveros O and Wongtschowski, M. (2017). Realities, perceptions, challenges and aspirations of rural youth in dryland agriculture in the Midelt Province, Morocco. Sustainability, 9(6), 871. https://www.youthpolicy.org/national/Ethiopia_2004_National_Youth_Policy.pdf
Journals/index.php/JCSD/article/view/2275914735903.2020.1721237
- Leavy, J., & Hossain, N. (2014). Who wants to farm? Youth aspirations, opportunities and rising food prices. IDS Working Papers, 2014(439), 1-44.
- Leavy, J., & Smith, S. (2010). Future farmers: youth aspirations, expectations and life choices. Future Agricultures Discussion Paper, 13, 1-15.
- Lindsjö, K., Mulwafu, W., Andersson Djurfeldt, A., & Kalanda Joshua, M. (2020). Generational dynamics of agricultural intensification in Malawi: Challenges for the youth and elderly smallholder farm, 19(5), 423- 436. <https://doi.org/10.1080/>
- Löwe, A., & Phiona, & S. (2017). Creating opportunities for young people in Northern Uganda's agriculture sector. Overseas Development Institute
- MacBrayne, P. (1987) Educational and Occupational Aspirations of Rural Youth: A review of the Literature. Research in Rural Education, 4(3): 135-141
- Mieso Woreda education Bureau (2021). Unpublished document
- Mieso Woreda Office of Agriculture and Natural Resource (2021). Unpublished document
- Ministry of Youth, Sports and Culture (2004). Federal Democratic Republic of Ethiopia National Youth Policy.
- MPLSDAPD (2005). Mieso Pilot Learning Site Diagnosis and Program Design. Project document
- Oromia Lowlands Livelihood Resilience Project (OLLRP) (2020): Chiro Cluster Rangeland Management and Investment Plan.

- Ouko, K. O., Ogola, J. R., Ng'ong'a, C. A., Gwada, R. O., & Wairimu, & J. (2021, March). Youth Involvement in Agripreneurship as Nexus for Poverty Reduction and Rural Employment in Kenya. *Journal of Agricultural*, 7(1), 968-981.
- Proctor, F. and Lucchesi, V. 2012. Small-scale farming and youth in an era of rapid rural change. London: IIED.
- Pyburn, R.; Audet-Bélanger, G.; Dido, S.; Quiroga, G.; Flink, I. Unleashing potential: Gender and youth inclusive agri-food chains. KIT Work. Pap. 2015, 7, 1–16
- Schewel, K., & Fransen, S. (2018). Formal education and migration aspirations in Ethiopia. *Population and Development Review*, 44(3), 555.
- Schewel, K., & Fransen, S. (2022). Who prefers to stay? voluntary immobility among youth in Ethiopia, India, and Vietnam. *Journal of Ethnic and Migration Studies*, 1-28.
- Sofia, T., (2010) Effects of Biofuel Production on Farmers' Livelihood in Mieso District of West Haraghe Zone, Oromia Region, Haramaya University.
- Sumberg, J., & Okali, C. (2006). Tomatoes, decentralization, and environmental management in Brong Ahafo, Ghana. *Society and Natural Resources*, 19(1), 19-31
- Sumberg, J.; Anyidoho, N.A.; Leavy, J.; te Lintelo, D.J.H.; Wellard, K. Introduction: The Young People and Agriculture 'Problem' in Africa. *IDS Bull.* 2012. [CrossRef]
- Trivelli, Carolina & Morel, Jeorge (2020): Rural Youth Inclusion, Empowerment, and Participation, *The Journal of Development Studies*, DOI: 10.1080/00220388.2020.1808194
- White, B. (2015) Generational dynamics in agriculture: Reflections on rural youth and farming futures. *Cah. Agric* 2015, 24, 330–334.
- White, B. (2019). Rural youth, today and tomorrow. IFAD Research Series, 48.
- White, Ben. (2012). Agriculture and the generation problem: rural youth, employment and the future of farming, *IDS Bulletin* 43 (6), pp. 9-19.
- Yami, M., Feleke, S., Abdoulaye, T., Alene, A. D., Bamba, Z., & Manyong, & V. (2019). African Rural Youth Engagement in Agribusiness: Achievements, Limitations, and Lessons. *journal of sustainability*, 1-15. doi:10.3390/su11010185