



Climate Change, Youth and Human Mobility in the Arsi zone

Oromia, Ethiopia

Acknowledgements



Report by
Ayuda en Acción

Work team
Marcela Ondekova, Ermyas Tadesse, Endas Kaso,
Julian Donoso

Coordination
Pilar Lara

Photo credits
Guillermo Jiménez Carazo

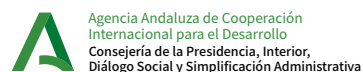


Written by
Instituto de Estudios sobre
Conflictos and Acción Humanitaria (IECAH)

Authors
David Perejil and Beatriz Sánchez Mojica

Coordination
Camille Nussbaum

With the financing of:



We want to thank all the interviewees who contributed to this study for their valuable contributions.

Contents

Abbreviations	6	6. Migration as an adaption strategy	44
Executive Summary	8	Push factors	46
Introduction	10	Pull factors	54
1. Methodology	14	Leaving home in the migration process	57
2. Ethiopia and the Arsi zone in context	18	Perceptions around the decision to migrate	62
3. The complex relationship between migration and climate change effects: A theoretical perspective	26	How migration projects affect living conditions in the Arsi zone: lessons from returnees	62
4. Increasing climate change effects in the Arsi zone	32	7. Domestic and international socio-economic climate change policies	66
Less rainfall and more droughts	34	8. Conclusions	72
The effects on agriculture, livestock and daily life	36	9. Recommendations	78
5. Surviving climate change in Arsi: Adaptation strategies	38	Annexes: Demographic Data Survey and Bibliography	86
Family and community coping mechanisms: struggling for success	40		
Crop substitution and improved irrigation systems to increase community resilience	42		



Abbreviations

IDMC		Internal Displacement Monitoring Centre
KII		Key Informant Interview
GRID		The IDMC's Global Report on Internal Displacement
FAO		Food and Agriculture Organization
FGD		Focus Group Discussion
IOM		International Organization of Migration
IDPs		Internal Displaced Persons
SNNP		Southern Nations, Nationalities and Peoples' Region in Ethiopia
NGO		Non-Governmental Organisation



Executive Summary

This report analyses the impact of climate change on human mobility in the Arsi Zone, Oromia Region, Ethiopia during the last five years. Home to 3.2 million people (49.98% female), this zone's economy relies heavily on small-scale agriculture and animal rearing. This makes its inhabitants, most of them smallholder farmers, extremely vulnerable to hydrometeorological hazards, such as erratic and reduced rainfall, droughts and torrential downpours. Food insecurity is the main outcome of this situation which, combined with the lack of job opportunities, triggers both internal and cross-border migration, particularly from young people. In fact, Arsi's rate of emigration is one of the highest in the country. Nevertheless, the impact of those hazards (strongly linked to climate change) on crop production and other livelihoods is not the sole cause of migration. As this report shows, several pull and push factors interact in this scenario triggering mobility processes. The report delves into the interaction between climate change and the social, economic, and political factors affecting migration processes in the Arsi zone, revealing the differentiated effects of these push and pull factors on women and young people. The public policies devised during in recent years to address the challenges posed by climate change to the region are also analysed in this piece of work.

The study is based on a quantitative survey conducted among 166 people (71 young people aged 16-30 and 95 people aged 31-60) of four

districts in Arsi with the qualitative findings of six youth Focus Group Discussions (FGDs) and nine semi-structured interviews with key informants. In addition, the research includes a pre-literature review with around 80 sources.

The analysis of both primary and secondary data revealed that climate change's effects on Arsi have increased in the last five years, negatively affecting agricultural activities, livestock, and even inhabitants' daily life. The already fragile conditions of this population, due to a combination of land scarcity, poor irrigation systems, overpopulation, and long-term poverty, have magnified the impact of natural hazards, leading to food insecurity and worsening impoverishment.

As a response to the challenging situation, individuals and communities have developed several coping mechanisms, such as seeking employment in urban areas, selling valuable assets, chopping and selling firewood, and even resorting to child labour. Some of these strategies have worsened their situation, hindering their ability to adapt to the new climatic scenario. Federal, regional and local authorities, as well as some international NGOs, have attempted to support adaptation efforts through the implementation of programmes for improving irrigation systems and crop substitution. However, according to the information gathered, these initiatives barely benefit the inhabitants of the studied areas.

Migration is another coping mechanism frequently deployed by Arsi inhabitants. As mentioned above, this process is triggered not only by climate change effects but by an array of factors including poverty, lack of income sources, and poor prospects for young people. Urban areas within the country and neighbouring Arab countries are migrants' main destinations, as there are plenty of job opportunities allowing them to send remittances to their families back home. Here is it relevant to mention that migration is usually a family project, in which all members of the group contribute to the journey. Therefore, the failure or success of the one who migrates affects the whole group. The study identified several successful stories, in which the family saw their income, as well as their resilience and adaptation skills, increase thanks to the resources obtained during the migration project. There were also testimonies of unfortunate journeys that left their protagonist poorer and even more fragile than before. Nevertheless, even in the best scenarios, migrating imposes a heavy toll, as those who undertake the journey face abuses, human rights violations, and risk of death on the route. Even if they manage to return home, reintegration poses a significant challenge.

Migrating is not the same for everyone, as gender and age influence the process. Young people are more likely to undertake

the journey than their elders, as they suffer from a greater degree of food insecurity and have few services adapted to their needs. Women, on their part, suffer the effects on climate change disproportionately, as they must cope not only with their own needs but with their families as well. Despite the existence of public efforts and programmes for gender equality, care work is still their responsibility. Therefore, their situation is particularly fragile before the journey. Once they start it, their challenges differ from those of men too. Domestic service is one of the few jobs they can aspire to, and they are more vulnerable to trafficking, sexual harassment, and exploitation.

In conclusion, the research shows that although climate change influences migration in the Arsi zone, it is a multicausal process, involving several factors such as poverty, land access issues, and lack of income sources. The gap between programmes tackling climate change effects and socio-economic fragilities and their impact on the most vulnerable people from the Arsi zone gives rise to the need for all stakeholders to strengthen their efforts to develop short, medium and long-term strategies particularly focused on young people and women. These new cross-cutting policies must be built on people's adaptive capacities, address the structural problems that cause fragility, and put mitigation and climate justice strategies at the forefront.



Introduction

Although the African continent has been responsible for about 3% of global emissions since the Industrial Revolution, it is one of the world’s areas most affected by climate change. According to a group of 250 scientific journals, led by The Lancet, droughts in Africa have tripled in the last four decades, while rising sea levels are reducing freshwater quality. In addition, flooding and lack of sanitation increase cases of disease, and natural disasters damage water and food supplies. The result is that in 2020, 281.6 million Africans were undernourished, an increase of 89.1 million over 2014, according to FAO¹.

The Horn of Africa region, which includes Ethiopia, is one of the hardest-hit regions in Africa, suffering from drought for the past five years. Drier areas, inhabited by pastoralist groups, have been the most affected by this slow-onset disaster and floods. In other regions of the country, the shifting and unpredictable rain pattern has negatively affected the harvest of

1. <https://www.fao.org/3/cb7496en/cb7496en.pdf>

traditionally fertile land. This was also the case of the Oromia region, which in “a study conducted by Oxfam International (2010) in Adami Tullu – Jido kombolcha, Oromia National Regional State indicated the total number of days of rainfall has decreased” and when the rain came, “it does with great intensity leading to flooding without recharging ground water resources”. According to the “Oromia National Regional State Program of Plan on Adaptation to Climate Change” (2011)², a decade ago the consequences were unpredictable patterns of the local climate, impacts on ecosystem, land degradation, pasture scarcity, wildlife loss, water stress, human, livestock and crop diseases, and food shortages.

Environmental problems add to the vulnerability of those sectors of the population engaged in subsistence agriculture or who own small businesses. These people suffer from severe socio-

2. https://www.academia.edu/32904711/Oromia_National_Regional_State_Program_of_Plan_on_Adaptation_to_Climate_Change_Team_Members_Participated_in_this_Document_Preparation_Regional_Task_force_Members

economic deprivation and a lack of services and education, which pushes them to seek new sources of income to support their families. Therefore, they must opt for occasional jobs in the cities, send their children outside the family, or migrate within the region or the country, according to World Bank research³, or, if there are sufficient means, to other countries to earn additional family income.

According to the research findings, young people aged 16 to 30 are the most vulnerable age group due to their difficulty in accessing farmland and the lack of services targeted specifically for them. Therefore, they are more prone than their elders to migrate to pursue new income sources. According to our survey data, women are also a vulnerable group, as they suffer higher levels of food insecurity than men and have to cope with their own needs and those of their families. Moreover, the challenges

3. <https://documents1.worldbank.org/curated/en/428111562239161418/pdf/Internal-Migration-in-Ethiopia-Evidence-from-a-Quantitative-and-Qualitative-Research-Study.pdf>

they face when migrating differ from those of men, as families choose to send them as domestic servants as one of the few jobs they are allowed to have abroad. These developments affect women's ability to both influence family decisions and contribute to mitigating the adverse effects of climate change.

This research analyses the factors (push, pull and rootedness factors) that lead young people to migrate, either internally or externally, from the Arsi zone and considers the impact of climate change as a factor during the last five years. It also attempts to consider the gender differences between women and men. In addition, it includes a list of institutional policies on socio-economics, migration and climate change in the area covered in the qualitative interviews. Unfortunately, due to the limitations and objectives of the study, this list is not exhaustive, something that will be interesting to cover in future reports. However, it has allowed us to compare the problems expressed by the people of Arsi with the proposed recommendations.

The project promotes various model activities, many of which have been recognised by the federal and regional government and other stakeholders

Measures against climate change have been implemented at different Ethiopian administrative levels (federal, regional, zonal, in districts and kebeles). In this sense, there is a cross-cutting strategy for the development of national agriculture implemented by the Ministry of Agriculture in collaboration with the World Bank and national reforestation and ecosystem protection programmes. The federal government has commissions and departments specialising in the fight against climate change. In the regional government of Oromia, there are various small-scale programmes. In the Arsi zone, there is a department of agriculture and a natural resource management office. There are also European Union (EU) and United Nations (UN) programmes in support of internally displaced persons, which also cover environmental issues.

Ayuda en Acción has operated in the Arsi Zone in close collaboration with the local government and non-governmental organisations since 2002. In 2018, Ayuda en Acción, officially registered as Ayuda en

Acción Ethiopia, joined two partners, SOS Sahel and Women in Self-Employment, to implement a four-year project aimed at “Promoting Resilient Environment and Livelihoods of Most Vulnerable Families through Reduction of Food Insecurity, Migration and Youth Unemployment and Service Enhancement”. The project is implemented in three districts: Arsi Robe, Ticho and Amigna, thanks to the funding provided by the Spanish Development Cooperation and the Ayuda en Acción sponsorship programme.

A substantial part of the project focuses on building the capacities of local farmers’ cooperatives and savings and credit groups with a high proportion of women. The project has directly supported 3,000 unemployed women, over 1,000 young people and 2,000 smallholder farmers in building their entrepreneurial and income-generation capacities. The project has also strengthened the institutional capacities of government agencies involved in job generation and women’s empowerment through providing training and assets. In total, 276 government



staff have benefited from these activities since 2019.

The project promotes various model activities, many of which have been recognised by the federal and regional government and other stakeholders. One such activity targets model Farmer Training Centres to enhance extension services provided to farmers, which are essential to expand good agricultural practices and the use of new technologies in agricultural production. Moreover, the farmer-based seed production model has contributed to increased access to high-yielding wheat and barley seeds by smallholder farmers, which has increased crop productivity by 15% to 20%. The Federal Government of Ethiopia recognised this community seed production system as one of the game changing solutions to transform the Ethiopian Food System. To build resilience capacities of smallholder farmers facing recurrent drought, Ayuda en Acción has been promoting biological and physical soil and water conservation through the production of multi-purpose seedlings and plantation,

in addition to promoting area closure to protect the areas from human and animal encroachment. The project has distributed nutritious, drought-tolerant and high-yielding crop varieties to improve community resilience in the moisture stressed lowland areas. These interventions have increased community and public sector awareness on climate change mitigation and adaptation measures. The project has improved the livelihoods of more than 37,500 people in Arsi.

Methodology



Methodology and research participants

The Ayuda en Acción team in Ethiopia, its partners in the field and the Instituto de Estudios sobre Conflictos and Acción Humanitaria (IECAH) team polled 166 people in the Arsi zone with a 40-question questionnaire. These surveys were divided into two main age groups: 71 were conducted with young people (36 men and 35 women) aged 16 to 30 and 95 were carried out with people aged 31 to 60 (64 men and 31 women). In the Annexes there is a demographic data summary of the people surveyed. Both samples have allowed us to compare the perceptions of the younger people themselves, in terms of their problems, with those of the community on the same issues. The surveys were conducted simultaneously, as youth focus groups and key informant interviews, on 25, 26, 28 & 29 September 2022. Within the Arsi zone, four districts were selected to

represent three areas of highlands, midlands and lowlands, which are affected in different ways by climate change. These were the districts of Amigna, Arsi Robe, Shirka and Dodota.

The research also included a series of nine semi-structured interviews with key informants (seven men and three women) with different profiles: government staff in charge of environmental disaster management and agricultural development, Spanish Development Cooperation Agency staff, federal NGOs working in the field of women's rights, local humanitarian NGOs, local credit associations, agricultural cooperatives and local leaders. All the interviews but one were conducted in person in Addis Ababa, Arsi Robe, Dodota, and Assala. Due to scheduling issues, the last one was held online.





The interviews were conducted in the following ways:

1. NGO, man and woman (Addis Ababa), 23 September 2022.
2. Regional government representative, man (Addis Ababa), 23 September 2022.
3. NGO, woman (Arsi Robe), 25 September 2022.
4. Local cooperative owner, man (Arsi Robe), 26 September 2022.
5. Zone government cooperative, woman (Arsi Robe), 26 September 2022.
6. NGO, man (Dodota), 29 September 2022.
7. District government representative, man (Assala), 30 September 2022.
8. NGO, man (Assala), 30 September 2022.
9. International donor, man (online), 7 October 2022.

To respect the anonymity of the interviewees, they will be identified by organisation type, gender and place of interview, e.g. NGO, woman (Arsi Robe).

In addition, discussions were held in six focus groups; half were made up exclusively of men and the rest of women. Three groups were composed of young returnees, two of young people with previous migration experience, and the last included young people with and without previous migration experience. In total, 34 people were part of the FGDs – 22 men and 12 women.

The research included a pre-literature review with around 75 sources (see the bibliography chapter in the Annexes) on migration and climate change for the Oromia region, the Arsi zone and other areas in Ethiopia.

Fieldwork location sites

Four districts in Oromia Region, Arsi Zone: Amigna, Arsi Robe, Shirka y Dodota.

Limitations

Limitations encountered in undertaking this research were as follows:

- Data collection through the survey and group discussions were carried out in parallel. In this sense, it would have been more productive to have had the survey results in advance.



- Difficulties with rains, military blockades and national festivities caused three key informants' interviews to be lost.
- The collection of international, federal, zonal and NGO climate change policies in the qualitative interviews and the survey has been insufficient to gain an adequate understanding of their efficiency and scope.

The Arsi zone in context

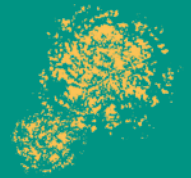


Home to about 115 million people, Ethiopia is the second most populous nation in Africa. Its population is projected to reach 139.6 million by 2030 and 190.8 million by 2050¹. As for population age, about 41% are under 15 years old, and over 28% are between the ages of 15 and 29².

1. World Bank Data Bank (2021). Health Nutrition and Population Statistics: Population estimates and projections - Ethiopia. URL: <https://databank.worldbank.org/data/reports.aspx?source=health-nutrition-and-population-statistics:-populationestimates-and-projections>.

2. Jobs creation Commission Ethiopia. Preliminary Assessment of the Labor Market in Ethiopia. Employment and job creation. April 2019.





The country recorded an annual increase of its minimum temperature of about 0.37°C per decade between 1951 and 2006 to reach a total accumulation of a 1.3°C increase in its average yearly temperature

The country has one of the fastest growing economies in the region. But despite that, with approximately one quarter of the population still living below the national poverty line, “Ethiopia continues to remain one of the poorest countries globally, with a per capita income of USD 790”³. Some 80% of the population live in rural areas, and only 20% live in towns or cities. Agriculture is a critical economic sector in Ethiopia, providing livelihoods for around three quarters of the population (86 million people) and generating 75% of the country’s foreign exchange earnings and 45% of the Ethiopian GDP. 85% of the population works in agriculture, the majority as subsistence farmers who own less than 0.8 hectare of land. Many others are semi-nomadic pastoralists, although only 1% of farmland has an irrigation system⁴.

Although Addis Ababa was the fourth most polluted city in the world in 2019⁵, the whole

3. <https://publications.iom.int/books/they-snatched-me-my-own-cry>

4. <https://ethiopianbusinessreview.net/despite-huge-potential-ethiopia-is-still-under-irrigated-why/>

5. <https://globalresidenceindex.com/world-most-least-polluted-cities/>

country of Ethiopia is responsible for a tiny percentage of global emissions, even less in its rural areas. It is also one of the most vulnerable countries to climate variability due to its high dependence on rain-fed agriculture, natural resources and relatively low adaptive capacity to cope with these changes. The country has a long history of recurrent droughts, which have increased in magnitude, frequency and impact since the 1970s. The 1983-85 drought-induced famine killed more than 1.2 million people, while the 2011 Horn of Africa drought forced more than 4.5 million people to rely on food aid. In addition, it has also frequently experienced extreme events such as flooding, while rainfall has decreased and temperatures have risen.

Ethiopia, like the rest of the countries in the Horn of Africa, is in its fifth consecutive year of drought. This is generating acute food insecurity, malnutrition⁶ and even famine in the southern and southeastern regions. Women and girls are paying a

6. <https://reliefweb.int/report/ethiopia/ethiopia-conflict-climate-shocks-women-and-girls-are-disproportionately-affected>

high price in drought-affected regions as they prioritise water use for drinking and cooking rather than washing during their menstrual periods⁷. Moreover, women are exposed to violence when collecting water, they have a burden of household work with limited resources and child marriage is increasing. Unicef recently warned, “the drought threatens to set Ethiopia back in its attempts to lower its levels of child marriage, which are among the highest in the world”⁸. In general terms, the section of the Ethiopian population most affected by climate change is the pastoralist community, around 15% of the country’s 115 million people, as was highlighted by international donor, man (online).

The country recorded an annual increase of its minimum temperature of about 0.37°C per decade between 1951 and 2006 to reach a total accumulation of a 1.3°C increase in its average yearly temperature. According to the

7. <https://www.rtve.es/noticias/20221005/sequia-pobreza-menstrual-mujeres-africa/2399410.shtml>

8. <https://www.theguardian.com/society/2022/apr/30/ethiopian-drought-leading-to-dramatic-increase-in-child-marriage-unicef-warns>

2022 IPCC report, the Ethiopian population is trying to adapt to these effects of climate change through changes in cropping patterns, spontaneous internal migration, improving education and training, using local knowledge, food-for-work programmes and other measures⁹.

In addition to climate change, since 2020 the country has been suffering from a violent conflict with the Tigray crisis. While a truce via a peace agreement was signed in November 2022, the war has led to more than 5 million internally displaced persons and severe consequences in terms of violence. It has also affected the country's economy, marked by an inflation rate of 34% in September and a problematic foreign currency shortage, limiting its imports¹⁰. This crisis has exacerbated other political conflicts in the country. It is linked to

9. Climate Change 2022: Impacts, Adaptation and Vulnerability Working Group II Contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change.

10. <https://www.crisisgroup.org/africa/horn-africa/ethiopia/b175-ethiopias-civil-war-cutting-deal-stop-bloodshed>



“tensions between the authorities and Oromo nationalists” in their claims for autonomy against the Federal Government. “At the centre of these tensions is the Oromo Liberation Army (OLA), which is waging an insurgency that appears to be gaining momentum after Oromo opposition parties boycotted the mid-June elections. The OLA is a splinter of the Oromo Liberation Front (OLF), a popular but fragmented party that advocates Oromia self-determination”¹¹.

According to IOM, it is estimated that approximately three million Ethiopians live and work overseas¹². Unfortunately, as there is no very detailed and up-to-date statistical information on emigration, these figures place it among the top African countries in terms of the number of emigrants (13) and remittances received (16). Ethiopian emigrants move mainly to the Gulf, South Africa and Europe and constitute the majority (80%) of those who join the mixed migration flows in and out of the Horn of Africa region. An estimated 0.14% of the Ethiopian population (about 160,000 people) move irregularly annually. Many people return in the form of irregular circular

11. Ibidem.

12. <https://publications.iom.int/system/files/pdf/theysnatched-from-me-my-own-cry-ethiopia.pdf>

migration. Finally, according to the data in the IOM 2022 report¹³, Ethiopia is also a receiving country for migrants and refugees.

Although the Oromia region, fertile for growing crops and livestock feed, is not the Ethiopian region most affected by climate change, the alterations above in rainfall are increasing the socio-economic vulnerability of its people, especially those engaged in traditional survival agriculture. Although the Oromo identify themselves as “the people of Gadaa, Siiqqee and Qaalluu”¹⁴, as cultural principles to preserve respectively what they consider peace, health and harmony between divine powers and the environment, they suffer from environmental degradation. The youth are more affected by difficulties accessing arable land as they were born after the 1991 land relocation when the new federal land ownership system replaced the previous nationalised land system of the communist Derg system. “In Oromia, for example, 87.7% of landless households were too young to benefit from the last kebele allocation that took place”¹⁵ that year. Furthermore, it should be highlighted that

13. <https://publications.iom.int/books/world-migration-report-2022>

14. <http://pubs.sciepub.com/ajphr/9/6/5/>

15. <https://www.fssethiopia.org/wp-content/uploads/2021/07/Policy-Brief-No.-43-EN.pdf>

Food insecurity is highly prevalent due to recurrent drought and crop diseases which cause loss of production and productive assets

women are still disadvantaged in terms of “access to and control of resources, mainly land, and benefits are determined by socio-cultural norms that significantly influence gender relations”¹⁶.

Arsi is in the central part of Ethiopia in the Oromia region. According to the Central Statistical Authority (CSA) projection made for 2017, the total population of the zone is 3,202,689 (49.98% female). Agriculture is the primary sector contributing to the local economy, dominated by smallholder mixed subsistence farming, crop production and animal rearing. Agriculture is exposed to the effects of climate change, which makes it vulnerable to extreme weather events such as drought, erratic rainfall, flood and torrential rain, negatively impacting crop harvest and pasture availability.

Food insecurity is highly prevalent due to recurrent drought and crop diseases which cause loss of production and productive assets. Given that farming land is shrinking, on average to less than one hectare, due to high population pressure, it is unsurprising to find many young people landless. Limited job opportunities for a large youth population are among the leading causes of youth migration to other areas within the

16. Ibidem.

country or abroad. Arsi is one of the areas with the highest emigration in Ethiopia. According to available data, in 2013, it was one of the top two Ethiopian internal migration areas along with the Gondar zone (Amhara region). According to the World Bank, most internal movements are to urban centres, with Adama and Addis Ababa being the main destinations¹⁷.

Cross-border migration also takes place in the region. Arsi is the second largest area in Oromia (after Jimma) in terms of migrants to international destinations, with a significant flow of people emigrating (mostly illegally) in search of employment to Arab and Gulf countries. Saudi Arabia is the leading destination, receiving 80-90% of Ethiopian labour migration. Kuwait, UAE, Oman, and Qatar also receive part of this human flow. Job opportunities, proximity, and well-trod routes of transit are three factors that explain the popularity of these

destinations. Nevertheless, the journey is often perilous, with a high risk of human trafficking. According to IOM, “about 70% of Ethiopians migrating to Saudi Arabia are victims of human trafficking for forced labour”¹⁸. Women are particularly vulnerable to this crime, being forced to work as domestic servants and prostitutes, according to research by the University of Leiden¹⁹. Trafficking networks are difficult to avoid, with some recruitment agents belonging to the victims' families.

The perils are not exclusively limited to the beginning of the journey. As most migrants are travelling irregularly, deportation from both transit and destination countries is not uncommon, even after staying in those countries for a considerable time. Mistreatment during the expulsion process is not unusual either. Returning home under these circumstances is never easy. In the case of migrants from Arsi, their plight is



worsened by their difficulties in reintegrating into their former lives and communities. “Tensions, strains and conflicts in familial and community relationships emerge during reintegration”²⁰. As cross-border migration is often a family project, demanding numerous resources, the failure of this joint venture entails impoverishment for the whole group, as well as frustration and broken dreams. Returnees, on their part, carry along with the scars of their journey the heavy burden of guilt, blaming themselves for their family situation. Finding a job or any income source back home is challenging, and NGOs and the community must support many who return. For women, the problem is even more difficult, as those who have suffered abuse in their migratory process may suffer social stigma upon their return. Psychosocial disorders are not uncommon among returnees²¹.

17. <https://documents1.worldbank.org/curated/en/428111562239161418/pdf/Internal-Migration-in-Ethiopia-Evidence-from-a-Quantitative-and-Qualitative-Research-Study.pdf>

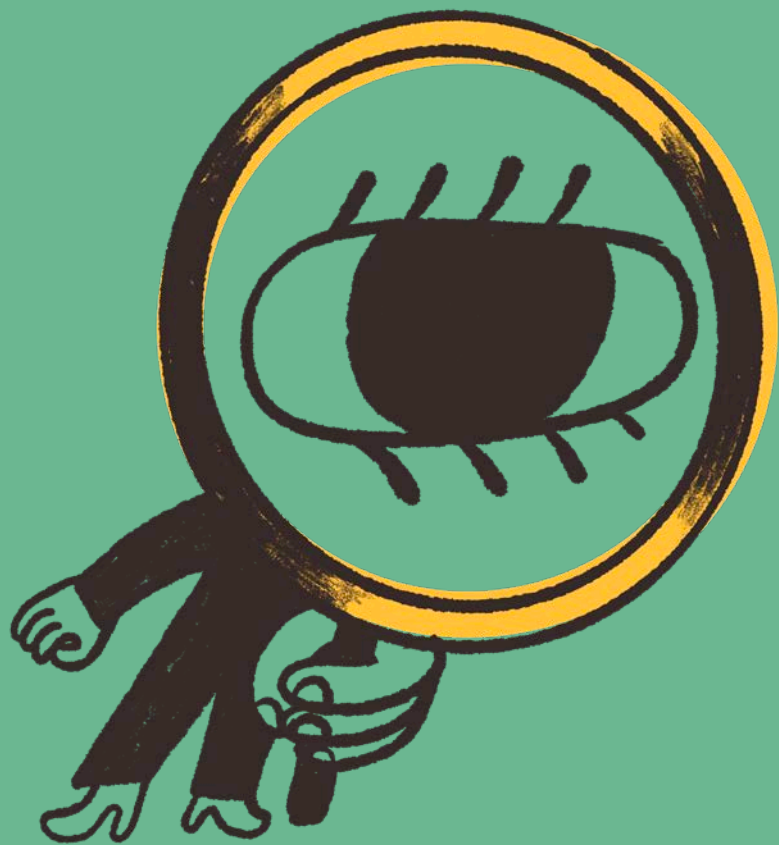
18. <https://publications.iom.int/es/node/2633>

19. <https://scholarlypublications.universiteitleiden.nl/access/item%3A3140445/view>

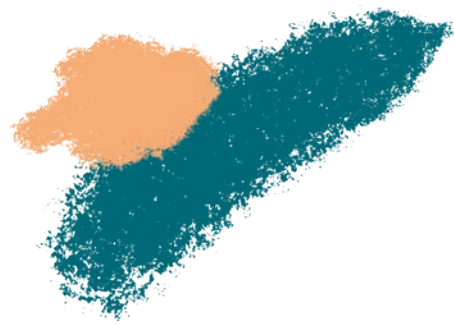
20. <https://publications.iom.int/es/node/2633>

21. Ibidem

The complex relationship between migration and climate change effects: A theoretical perspective



Up to now, this report has made several references to how climate change has affected human mobility in the Arsi zone. Before going further into the migration processes that are taking place in this area, it is necessary to establish a frame of reference to understand the phenomenon we are facing and clarify certain basic concepts. These explanations are essential since adequate knowledge of this type of human mobility facilitates the realisation of an adequate diagnosis in the specific case, as well as the search for alternatives to improve the quality of life and the protection of the human rights of migrants and their communities of origin.



These migration processes do not necessarily involve all community members, nor are they always permanent

The first point to clarify is that this report focuses on a specific type of human mobility: migration. This is predominantly a voluntary process, different from forced displacement. However, the degree of agency and the ability to plan the migration process are rarely absolute in contexts linked to the effects of climate change¹. Including a person or group in this category implies that they are subject to the migration rules and systems of the countries of origin, transit and destination under the same conditions as any economic migrant².

The second point is that climate change does not cause direct migratory processes. However, its impact exacerbates pre-existing environmental or socio-economic conditions that may affect human mobility³. On the one hand, it affects disasters associated with weather since it increases the frequency and intensity of hurricanes, torrential rains and droughts, as well as the reduction of glaciers, the rise in sea level and the increase in sea

temperature⁴. However, the mere occurrence of a weather phenomenon is not enough to produce a disaster. For it to occur, it must be combined with a vulnerability, lack of capacity, and exposure to risk⁵. On the other hand, climate change can affect agricultural production – with the consequent impact on food production and supply – and water resources, increasing inequalities in access to these resources, which eventually has the potential to generate violent conflicts or intensify existing ones⁶.

However, for migration to occur, it is not enough for a disaster or conflict to erupt. In addition to those situations, which are factors of expulsion, there are other elements linked to the places to which migratory flows are directed, making them attractive either as places of transit or as destinations. These factors include security

conditions, political and economic stability, employment opportunities, the possibility of obtaining high salaries and access to public goods and resources. Moreover, other elements that facilitate or restrict migration also play a role in these processes. This is the case for factors that link people and communities to a given territory for cultural, economic or sentimental reasons, as well as the migration policies of the countries of origin, transit and destination⁷. Finally, the specific situation of individuals and communities must be considered. Undertaking migration requires resources and individual capacities; therefore, those in a particularly fragile situation cannot leave their habitual residence⁸.

A third point to bear in mind is that if migration linked to the effects of climate change takes place, it presents different patterns. Although it can occur internally and internationally, several studies agree that most of these movements occur within states. Crossing international borders requires numerous resources and

additional planning capacity, which makes it less common. In this second scenario, the intervention of human smuggling and trafficking networks is not uncommon, increasing the vulnerability of those undertaking these processes⁹.

The type of disaster that has triggered the process affects the pattern of the movement. Although it is impossible to establish fixed rules, specific trends have been identified. For example, sudden-onset disasters – those evident to the naked eye, such as those caused by torrential rains, floods and landslides – tend to cause displacements for short periods in which those affected do not usually move very far from their place of origin, since they intend to return as soon as possible. However, slow-onset disasters – those occurring over a long period, such as desertification processes – give rise to more stable migrations¹⁰. These migration processes do not necessarily involve all community members, nor are they always permanent. In countries such as Kenya, Ethiopia, Uganda and Somalia, for example,

1. Mayer, Benoît, *The concept of climate migration. Advocacy and its Prospects*, Cheltenham, UK, and Northampton, MA, USA: Edward Elgar Publishing, 2016, p. 8.

2. Nansen Initiative (2015), *Guiding Principles on Internal Displacement and the Nansen Initiative Protection Agenda* (2015) and United Nations General Assembly (2016) *Global Compact for Migration*.

3. McAdam, Jane, *Climate Change, Forced Migration and International Law*, Oxford: Oxford University Press, 2012, p. 16.

4. IPCC, Intergovernmental Panel on Climate Change, *Climate Change 2007 - The Physical Science Basis: Working Group I Contribution to the Fourth Assessment Report of the IPCC*, Cambridge y New York, Cambridge University Press, 2007.

5. SÁNCHEZ, Beatriz and RUBIANO, Sebastián. *Territorios en transformación, derechos en movimiento. Cambio climático y movilidad humana en Colombia*. Bogotá: Ediciones Uniandes, 2018, p. 8.

6. MARTIN, Susan, “Managing environmentally induced migration”, *Migration, Environment and Climate Change: Assessing the evidence*, Aghazarm, Christine. y Laczko, Frank (Eds) Geneva: OIM, 2009 p. 365. HUGO, Graeme, *IOM. Migration Research Series. Migration, development and environment*, N° 35, Geneva: OIM, 2009.

7. KNIVETON, Dominic, SMITH, Christopher, BLACK, Richard, and SCHMIDT-VERKEK, Kerstin “Challenges and approaches to measuring the migration-environment nexus”, *Migration, Environment and Climate Change: Assessing the evidence*, Aghazarm, Christine and Laczko, Frank (Eds), Geneva: OIM, 2009, p. 30.

8. McADAM, Jane Op. Cit., p. 13.

9. NAIK, Asmita, “Migration and Natural Disasters”, *Migration, Environment and Climate Change: Assessing the Evidence*, Aghazarm, Christine. and Laczko, Frank (Eds.) Geneva: OIM, 2009, p. 274-275.

10. BROWN, Oli, *Migration and Climate Change*, Geneva: IOM Migration Research Series, 2008. HUGO, Game, *Migration, development and environment*, Geneva: International Organization for Migration (IOM), 2009.



the temporary migration of young people to cities or even abroad is frequently resorted to by affected rural communities. In this way, they obtain resources to alleviate drought through remittances while reducing pressure on the land at times of peak scarcity¹¹. This strategy is also used by communities affected by sudden-onset disasters that recur cyclically, such as those associated with hurricanes, seasonal torrential rains or intermittent droughts¹².

Migration has traditionally been seen as an adaptation strategy, meaning it allows individuals and communities to adjust to the present and future challenges posed by a new environment while reducing their vulnerability and strengthening their capacities¹³. Indeed, the Cancun Adaptation

Framework, adopted by the 2010 UN Climate Change Conference (COP 16), argues that, unlike displacement, migration can be a pathway to successful adaptation, a position advocated by several bodies, including IOM¹⁴. It has been pointed out that through migration, affected families and communities can diversify livelihoods, increase their resilience, and move away from areas exposed to disaster risk¹⁵. This is, however, a statement that should be qualified since the potential of this strategy depends, to a large extent, on those who undertake it having real agency, as well as the possibility of knowing and rationally assessing the different alternatives available to them. Reactive migration processes, which take place once the disaster has occurred, present more significant difficulties in meeting these conditions than those of a proactive nature, which are planned to prevent the catastrophe or mitigate its most damaging

effects before it takes place or is completed (in the case of slow-onset disasters). The non-economic effects of migration, such as the impact on community ties and the mental and emotional effects, must also be considered, as they can negatively affect its capacity to be an adaptation strategy¹⁶.

Finally, it should be mentioned that factors such as age and gender (among many others) affect the migration process in contexts affected by climate change. On the one hand, women and children present higher levels of vulnerability and exposure to risk than men and face different effects once disasters affecting human mobility occur. On the other hand, gender roles and the place assigned to young people in each culture and society determine the decision to undertake migration and the pattern it adopts. There is, therefore, no general rule. Case studies reveal that in some contexts only men migrate, while in scenarios such as in Arsi, both genders embark on this process. Nevertheless, even in this case, gender roles affect the way migration takes

place, the risks faced during the journey, and the employment options available at the destination. As mentioned above, although men and women are targets for trafficking networks, the latter are more exposed. Once in the host countries, migrant women are prone to being hired as domestic servants, whereas men find outdoor jobs, such as construction or agriculture¹⁷. Likewise, in some communities, migration is the responsibility of young people, while in others, it is the task of male heads of household. In a context like the one studied here, the lack of land and economic opportunities affect young people to a higher degree than other population sectors, becoming a pull factor for this age group.

11. LEIGHTON, MICHELLE, "Migration and slow-onset disasters: desertification and drought", Migration, Environment and Climate Change: Assessing the Evidence, Aghazarm, Christine and Laczko, Frank (Eds.) Geneva: OIM, 2009, p. 327.

12. NAIK, Op. Cit. p. 271-272

13. IPCC, "Anexo ii: Glosario", Cambio climático 2014: Informe de síntesis. Contribución de los Grupos de trabajo i, ii y iii al Quinto Informe de Evaluación del Grupo Intergubernamental de Expertos sobre el Cambio Climático, Geneva, 2014, p.127.

14. FELLI, Rmain, "Managing Climate Insecurity by Ensuring Continuous Capital Accumulation: "Climate Refugees" and "Climate Migrants," New Political Economy, Vol. 18, Issue 3, 2013.

15. BLACK, Richard, BENNETT, Stephen, THOMAS, Sandy, and BEDDINGTON, John, "Migration as adaptation", Nature, 478, 2011.

16. VINKE, Kira, BERGMANN, Jonas, BLOCHER, JULIA et al. 'Migration as Adaptation', Migration Studies 8(4) 2020.

17. FELIPE, Op. Cit.

Climate change effects in Arsi are increasing



In recent years, the effects of climate change have increased in Arsi. They have affected the reduction and variability of rainfall and increased extreme events such as droughts and floods. Securing a minimum amount of water for crops and animals is vital for subsistence farmers in the area, whose income is crucial for the most fragile populations who depend almost exclusively on them. However, the shortening of the rainy season and its reduction to a single period have affected crop productivity. Moreover, droughts are increasing Arsi's vulnerability and even food security.



Less rainfall
and more drought

Changes in the weather and the environmental impacts are more profound and advancing more rapidly than some years ago. A study by Lund University discovered that prolonged droughts and delays in the rain were the most common climatic shocks for the west zone of Arsi in 2009, showing: “a dramatic decline” from the 1970s in the precipitation trend, particularly in the lowlands area¹. This tendency was also proved in another study of the Arsi Negele zone, showing a decline in total rainfall of 10.16mm per annum. It also added an increasing annual temperature trend of 0.047°C from 1983 to 2014². Even though there is a lack of quantitative studies at the local level, another piece of research compiled the perceptions of the inhabitants of the west Arsi districts of Siraro, Shalla and Shashamane. This again

1. http://genderlinks.org.za/wp-content/uploads/imported/articles/attachments/13765_climate_change_impact_on_livelihood_vulnerability_and_coping_mechanisms-a_case_study_of_west_arsi_ethiopia.pdf
2. https://www.researchgate.net/publication/315629326_Analysis_of_observed_and_perceived_climate_change_and_variability_in_Arsi_Negele_District_Ethiopia/link/5d42f69192851cd04699a7c1/download

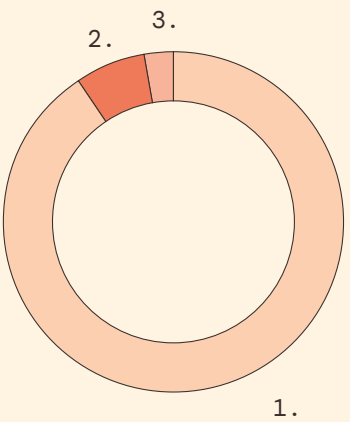
showed that “uncertain precipitations during the two Ethiopian rainy seasons and increased temperatures registered in the last years impact crop production, livestock management and, as a consequence, the subsistence agricultural production systems that, in this country, solely depend on rainfall” (figure 1).

According to our research results, the vast majority (90%) of respondents in the Amigna, Arsi Robe, Shirka and Dodota districts believe that the consequences of the climate crisis have advanced over the last five years. This worsening of climate change was also corroborated in all key informant interviews, with the sole exception of a 58-year-old woman, a leader of a savings and credit cooperative, who stated that her village was not suffering from the effects of climate change³ (figure 2).

For our survey respondents, the main consequences of the climate crisis are delayed rainfall (31%), droughts (27%) and low land productivity (17%). These were also the three most cited phenomena in the same order of importance, according to the

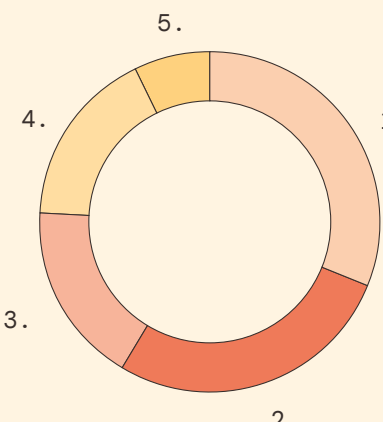
3. Ibidem

Figure 1:
Total 16-59 years old -
Climate Change Extension



1. Increase | 144 (90,57%)
2. Decrease | 11 (6,92%)
3. Stable | 4 (2,52%)

Figure 2: Total 16-59 years old -
What environmental problems have
affected you the most?



1. Rains delays/erratic | 135 (31,18%)
2. Droughts | 119 (27,48%)
3. Land degradation/loss of soil fertility | 75 (17,32%)
4. Crop and livestock disease | 73 (16,86%)
5. Floods | 31 (7,16%)

words of our interviewees. From our survey data, we also observed that drought was the phenomenon most suffered in the lowlands of Dodota, and it is the phenomenon that most concerns young women (31%).

Having the same amount of rainfall each year at the same time is critical for subsistence agriculture in Arsi. Smallholder farmers depend mainly on the amount of rain to secure their crops, so any decrease or variability in rainfall affects them directly. As district government representative, man (Assala) explained, ten years ago there were two rainy seasons per year, allowing smallholders to grow two cropping seasons. Since then, the rain pattern has become less predictable, and the precipitation volume has decreased. Nowadays, the rainy summer season is shorter, while the spring one has almost disappeared. This shift, partially attributed by another interviewee to a change in the winds coming from the Indian Ocean, has had devastating effects on the

farmers’ planting, cultivation and harvest calendar.

The effects of crop reduction have particularly hit the most fragile population sectors. Young women of Amigna highlighted the impossibility of growing vegetables correctly. Variations in rainfall patterns have also affected the population’s lives in recent years. Youth in Amigna and Shirka detailed a daily life in which they have experienced all kinds of rainfall variations, from droughts to floods and declining rainfall. Finally, in the lowlands of Dodota, the youth said that they suffered with anguish from the interval of rain because it “may come maybe once a week or may come monthly” during the main rainy season.

Increased droughts are a vital indicator of the degree of vulnerability and even food security in Arsi. Key informants highlighted the influence of increased droughts on the exposure of the people of Arsi. For NGO, man



and woman (Addis Ababa), there is no doubt that the effects of "droughts have claimed the lives of many livestock and people" across the country and have also severely affected the Arsi and Oromia area. According to December 2022 UNOCHA information, "22.6 million people are estimated to be food insecure in the country mainly due to the drought in southern, southeastern, and eastern parts of the country; conflict in northern and western parts",⁴⁴ with growing rates in western parts of Oromia. It confirms another report by UNOCHA of late November 2020 that include Oromia, Afar, Somali and SNNP Ethiopia regions in "food insecurity" criterion. Other local NGOs in the Arsi area directly link the droughts to the food insecurity of the population. Arsi Zone Red Cross argues that around "435,000 people need food" due to the shortages. NGO, man (Dodota) also comments that it was necessary to increase food deliveries by 2,000 to 17,000 beneficiaries because of the droughts. According to our survey data, one third of respondents said that they suffered from droughts at a frequency of once every two years, followed by 28% of people who did so every three years. By group, young people

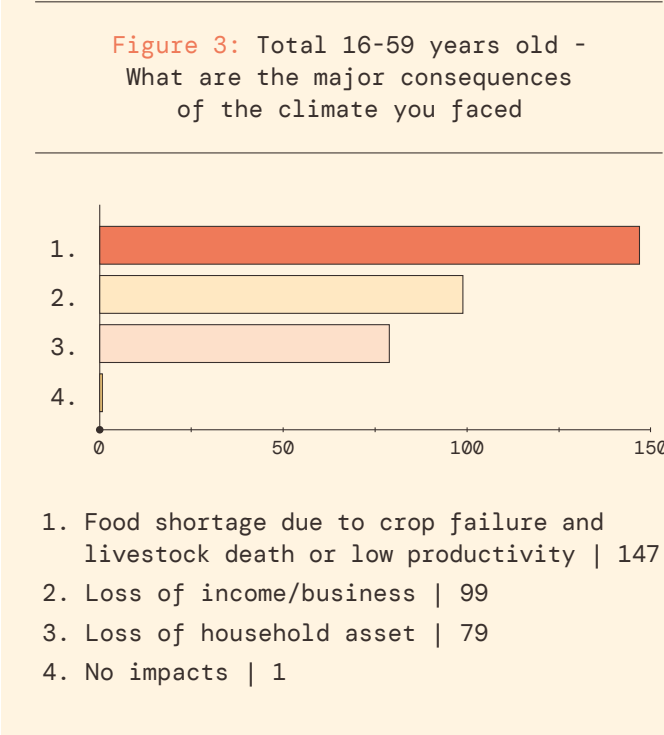
aged 16 to 30 suffered more intensely (32% every year). But above all, young women said they were the most affected by drought among the entire sample (36% each year).

The effects on agriculture, livestock and daily life

Increasing variations in rainfall and drought affect land productivity. As in other areas of Ethiopia, there is a heavy reliance on subsistence farming and livestock rearing in Arsi, and there are few forms of economic diversification. Young returnees from Shirka expressed how their agricultural production was affected by the decline in rainfall to the extent that they had to harvest only part of their land, instead of all of it, or to switch their former crops to the more resilient red bell pepper. NGO, man (Assala) noted that even in the areas of Arsi best known for their high "barley and wheat production are also currently declining". This was also pointed out by a smallholder and local leader arguing that environmental problems affect land and livestock productivity. On the other hand, the NGO key informants, NGO, man and woman (Addis Ababa) linked the decline

in productivity "to the number of livestock, the level of shipments, stock assets and crop failures". For them, the most important consequence is that declining productivity also affects the livelihood possibilities of communities.

As noted by two key informants, feeding their animals is becoming increasingly difficult due to the decrease in rainfall. It is also worth mentioning that the number of animal diseases is increasing. Thus, for NGO, man (Assala), "livestock diseases are caused by the effect of increased temperature due to climate change". He also mentioned that crop diseases have changed in the last five years, affecting biodiversity and causing significant problems. Both are very important, considering that most of the surveyed population has little land and few livestock. According to our survey, livestock is as crucial as land ownership, with people reporting having cattle, chickens, equines, goats and sheep in small numbers: most had two animals, while some had none. Finally, the increase in locust infestations in recent years was also mentioned twice as having affected crops in recent years.



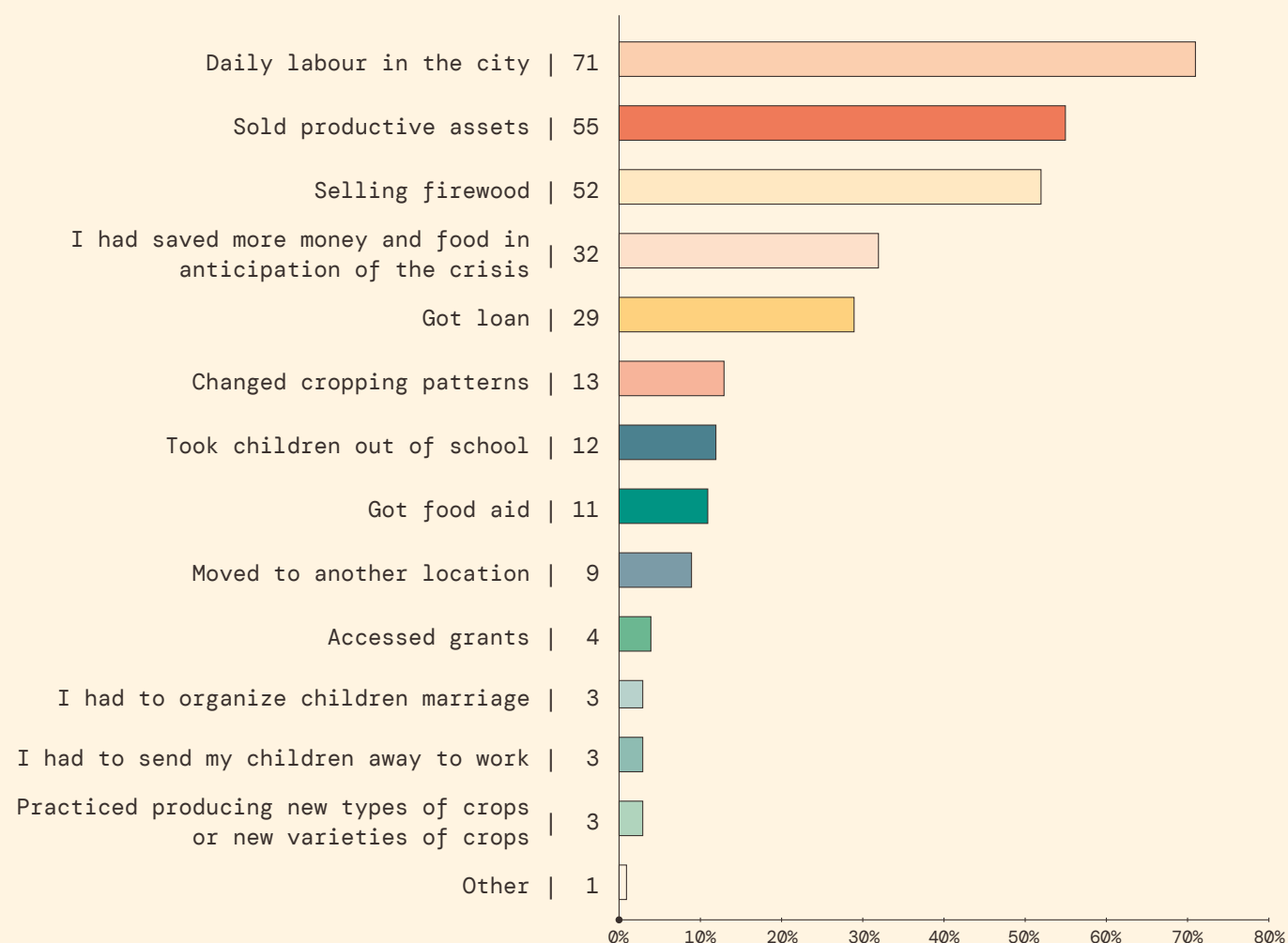
In summary, according to our survey, the main consequences of climate change effects reported by the population in Arsi were food shortages (45%), loss of income (30%) and loss of household assets (24%). It should be noted that adult women (aged 31 to 60) were the ones who reported feeling affected by food shortages (55%) (figure 3).

Surviving climate change effects in Arsi: adaptation strategies



The impacts of climate change have forced the people of Arsi to develop different coping mechanisms to prevent and reduce damage, build capacity and acquire the resources needed to face the challenges posed by the new climate conditions. However, only some of these strategies lead to a successful adaptation process, as some can increase vulnerability or even be detrimental to human rights, especially of children and young people. That is the case with some of the strategies identified during the field visit, such as: wood commercialisation – which affects the already reduced forest resources in the region – the sale of productive assets and child labour. All these strategies aim to maintain the level of household or community income affected by poverty and the effects of climate change.

Figure 4: Total 16-59 years old - Major coping mechanisms due to climate change



Migration is another common coping mechanism in this region, usually temporary and from rural to urban areas within the country. In sharp contrast with the other strategies, this can lead to adaptation if some conditions are met. Nevertheless, that is only sometimes possible, as this report shows.

Family and community coping mechanisms: struggling for success

Families and communities try to adapt to the new rainfall patterns, droughts and loss of land quality through some short-term, income-oriented coping strategies to mitigate the impoverishment and drop in income caused by the climate crisis. In

that sense, when asked about this issue in the survey, the inhabitants of the Arsi area responded that daily work in the city (23%), selling productive assets (18%) and selling firewood (10%) are the three most common within a wide variety of strategies, that include increasing savings in money and food, resorting to child labour, or even to child marriage. Comparing the total of women to men, the order of the strategies is the same, but there is more female daily work in the city as the primary strategy. Considering only the young respondents, we find that the choice options are very similar (daily labour, selling firewood and productive assets). But if we break down the data between genders, we observe a difference in the fourth most common strategy. For example, young women choose to take out loans (12%) whereas older

Figure 5: Total Women 16-59 years old - Major coping mechanisms due to climate change

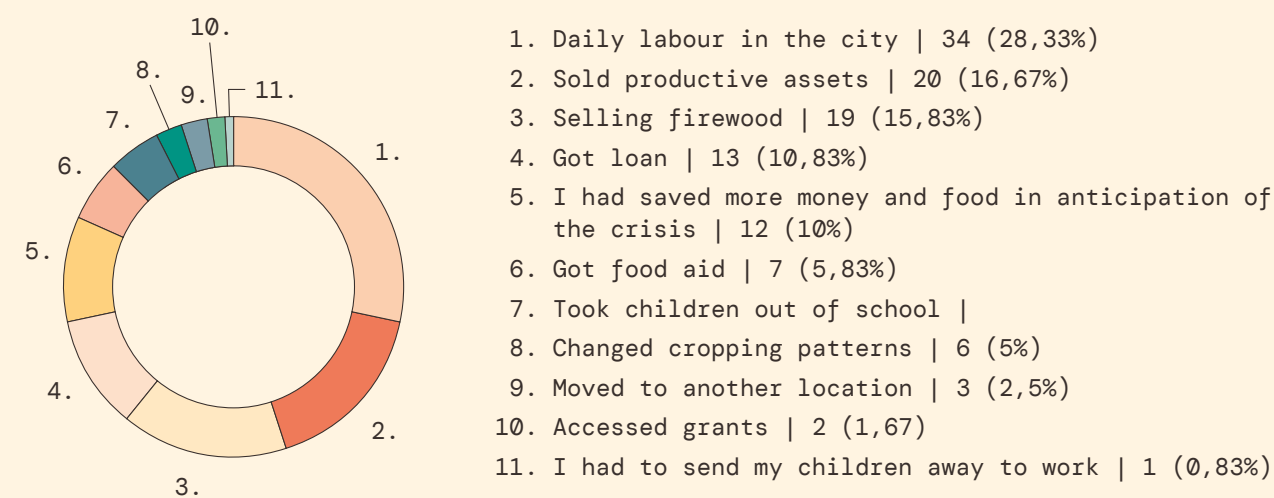


Figure 6: Total Young People 16-30 years old- Major coping mechanisms

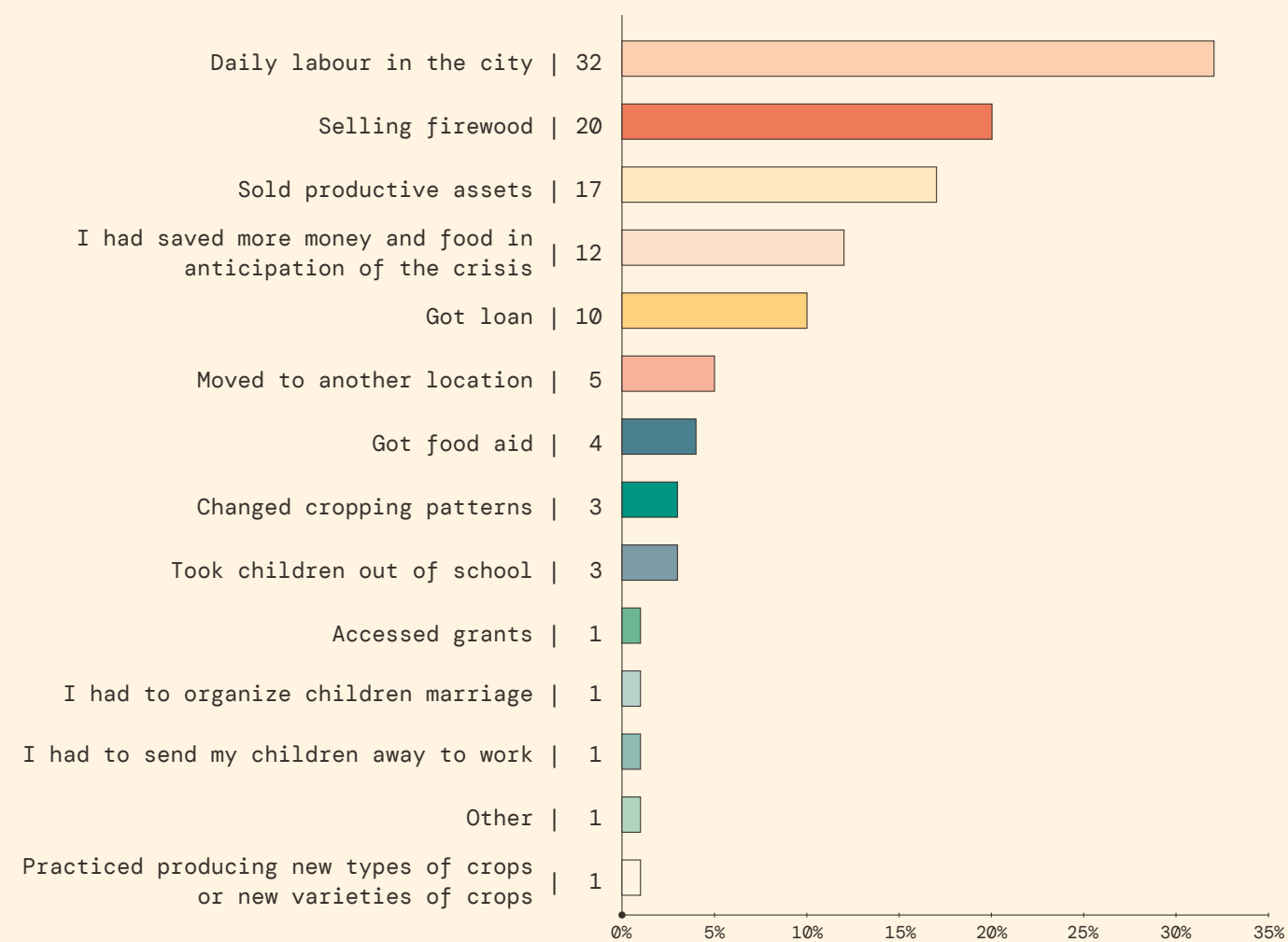
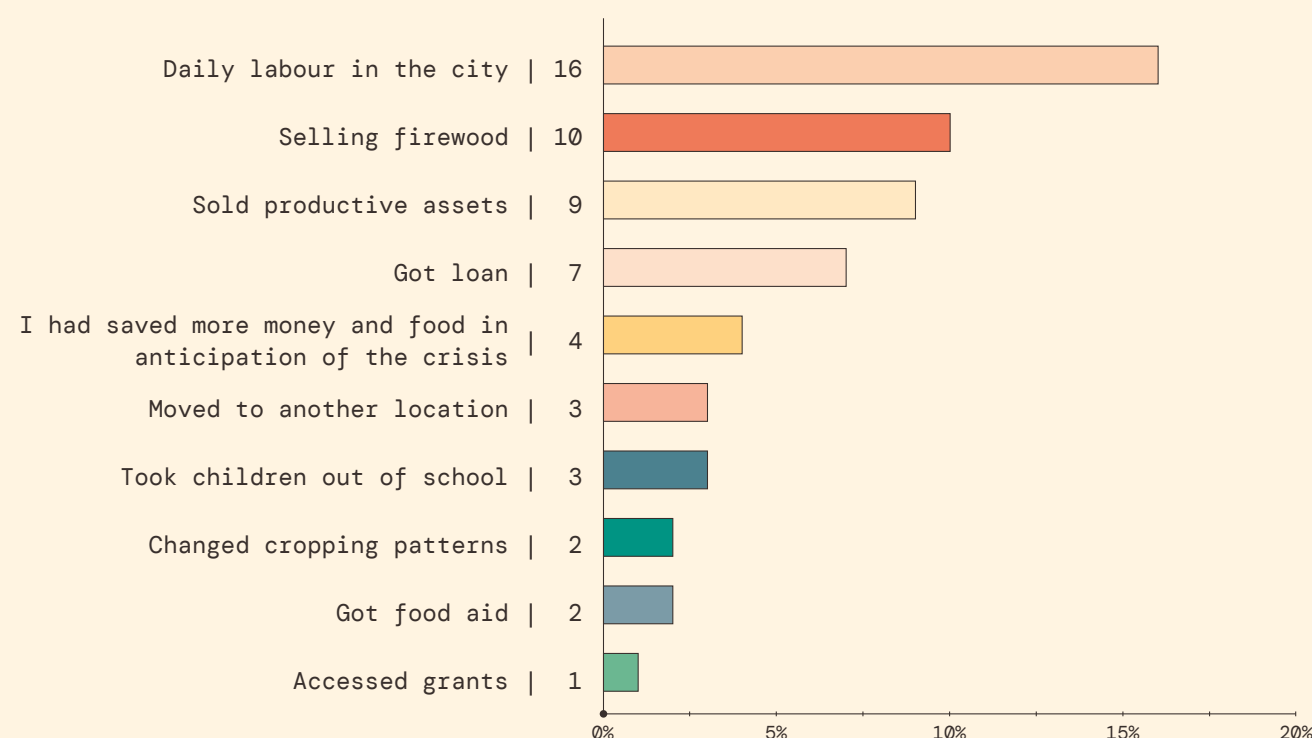


Figure 7: Total Young Women 16-30 years old- Major coping mechanisms



women choose to save money (12%). In the case, of young men is selling of productive assets (14%) whereas older men is getting loans (10%). According to these data we can presume more dynamic strategies in young people meanwhile older women they are forced to increase survival strategies even further. These coping strategies are practised even if they know their damaging consequences. Thus, young men from Amigna know that collecting and selling firewood contributes to deforestation and increased climate change but cannot come up with another way to meet their needs. A much more dramatic predicament is faced by young women in the same locality, forced to send their children away as familiar choice with the involvement of her husband or male relatives: "to other family members to provide labour services" to improve their incomes.

All these strategies are desperate measures taken as a last resource to provide for family or community survival, revealing the failures of the public policy on adaptation

for the Arsi zone. Although some general strategies will be presented in the next section, many people feel left to their own devices to cope with increasingly challenging climate conditions. As the owner of the livestock cooperative Arsi Robe put it, the most common strategy is to wait for the rain to come and try to crop whatever the land produces.

Crop substitution and improved irrigation systems to increase community resilience

According to the latest IPCC report, some coping mechanisms are working in the whole of Ethiopia, such as crop and farm diversification, watershed conservation programmes, urban migration, livestock diversification, social safety nets, soil conservation training and other agricultural programmes¹. These strategies are applied

1. <https://www.ipcc.ch/report/ar6/wg2/>

differently at all different levels – from governmental to household and community levels. The IPCC report does not elaborate further on the extent of the efficiency of each of them.

In this regard, some NGOs, agricultural cooperatives and government agricultural departments have tried to implement different strategies, as we found in our research. Firstly, one NGO highlighted the benefits of using irrigation water from rivers near Dodota to alleviate the decrease in rainfall. Secondly, the Arsi Robe cooperative owner mentioned the excellent results of changing crops to more productive ones that are adapted to the new environmental situation.

For NGO, man (Assala), it is clear that some adaptation strategies work, especially "the use of short-duration crops", such as corn that grows in about two months instead of the common ones that usually need 90 days. This man knows the benefits of undertaking small-scale irrigation and watershed activities and adapting planting schedules according to new weather patterns. This crop diversification, proposed by officials in the area's capital city, involves modernising the population's traditional agriculture methods using modern "cropping systems, fertilisers and irrigation systems", which the interviewee acknowledged needs "intensive work by both the government and NGOs and individuals" to succeed. However, it should be noted that these strategies have reached very few of the respondents included

in this study. As was mentioned in the Amigna young women's FGD, one of the main problems is the shortage of chemical fertilizers for the land.

As man 9 (online) said, it is necessary to differentiate between "the real mechanisms of development and the mechanisms practised by the population". In this regard, he mentioned human mobility, traditional land reclamation mechanisms, new crops introduced by cooperatives, reforestation, and maintenance of water resources, among others. Regarding the coping means that the government and international donors should improve, he prioritised "the recovery of degraded land by optimising resources". In addition, consideration should be given to whether introducing new monoculture varieties would affect or improve soil fertility.

Migration as an adaptation strategy



Migration occupies a suitable place among the coping strategies of Arsi inhabitants. Nevertheless, it cannot be considered merely a response to climate change effects. As mentioned in the third section of this report, it is always a complex process involving multiple factors. Therefore, it is necessary to delve into the diverse elements that interact in this scenario, to understand the causes and patterns of migration.



Push factors

The Arsi zone is an impoverished region in which inhabitants are facing increasing food insecurity, as in the whole country, which had 23.5% of its population under the poverty line in 2015. Moreover, “20 million people in 2022 needed food assistance” due to the conflicts, droughts and the rising of food price and cereals (corn and sorghum) that “could have reduced real per capita consumption of households in the bottom 40% per cent of the distribution by 8%”¹. According to research by Ethiopia’s Planning and Development Commission, Oromia was the fourth region in the consumption poverty index (23.9%) in 2015/16². Some Arsi districts and kebele were significantly affected, such as the Shashemene district in the West Arsi zone, which was vulnerable to food insecurity and flooding, as evidenced by the fact that 29 of the 39 rural kebeles were food insecure in 2021³ (figure 8, 9, 10).

1. https://databankfiles.worldbank.org/data/download/poverty/987B9C90-CB9F-4D93-AE8C-750588BF00QA/current/Global_POVEQ_ETH.pdf

2. https://www.dagethiopia.org/sites/g/files/zskgke376/files/2022-03/poverty_economic_growth_in_ethiopia-mon_feb_11_2019.pdf

3. https://www.researchgate.net/publication/357339405_The_Determinants_of_Vulnerability_to_Poverty_Among_Female_Headed_Households_in_Rural_Ethiopia_The_Case_of_West_Arsi_Zone_Shashemene_District



The survey for this report revealed that 58% of participants considered their income insufficient for their basic daily needs, followed by 24% who lived on a day-to-day basis. Comparing by ages, we observed that adults’ perceptions were higher, with 63% feeling that their incomes were insufficient for basic needs in relation to 50% of young people. This situation has only worsened over the last five years for 81% of respondents. In this context, migration has become a route out of poverty, particularly for young people who see it as a way to improve their personal and family situation. The scarcity of agricultural land, limited access to education and other essential services and the virtual absence of job opportunities, other than those connected to subsistence agriculture, are other factors that interact in this scenario, pushing people – especially the young – away from their hometowns. In addition, these structural factors are compounded by inflation, fuelled by the Tigray conflict and the war in Ukraine, and the consequences of climate change are impoverishing families even more and forcing them into even more precarious livelihoods.

Not only is poverty a relevant push factor, but it also affects the choice

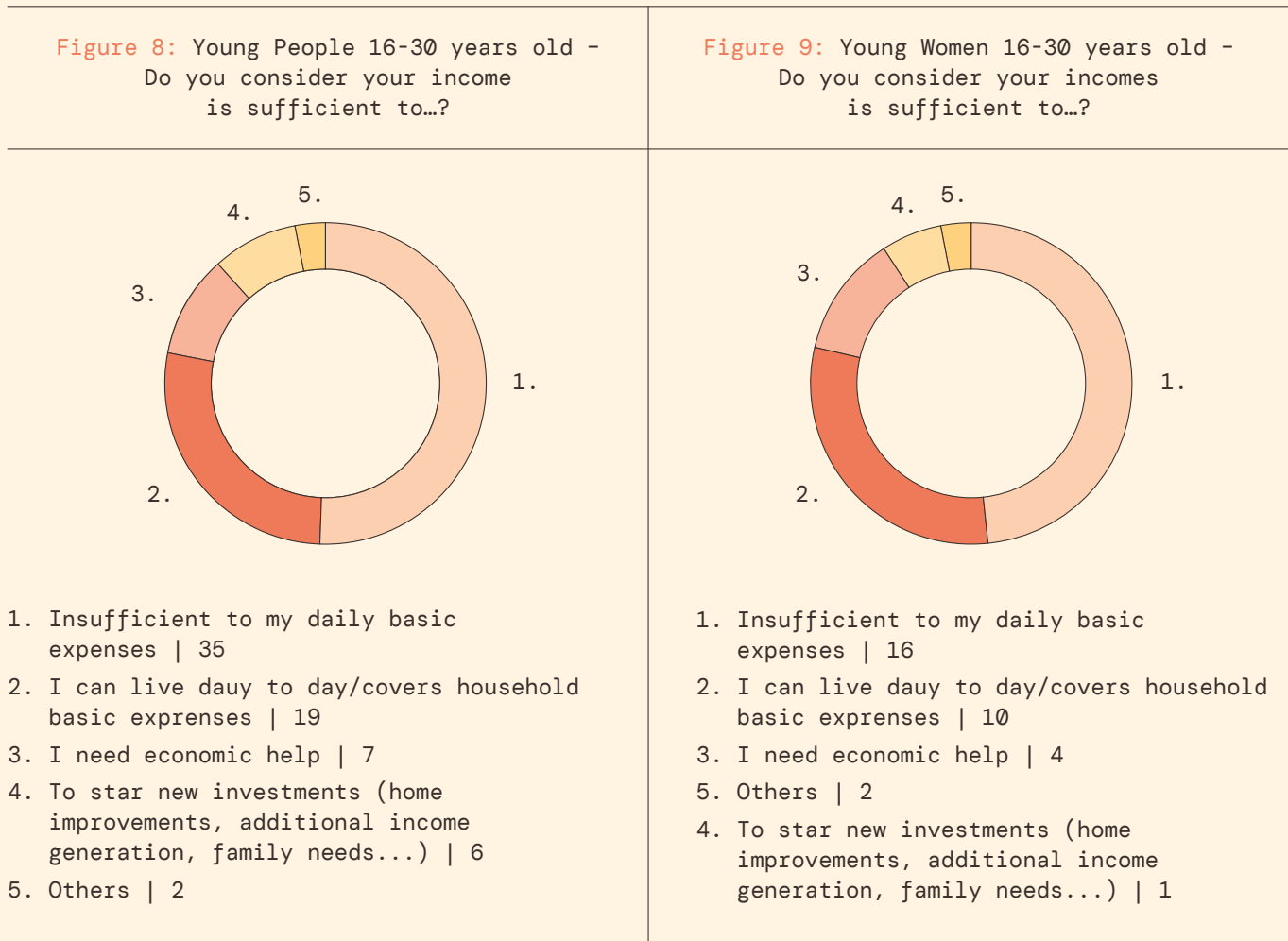
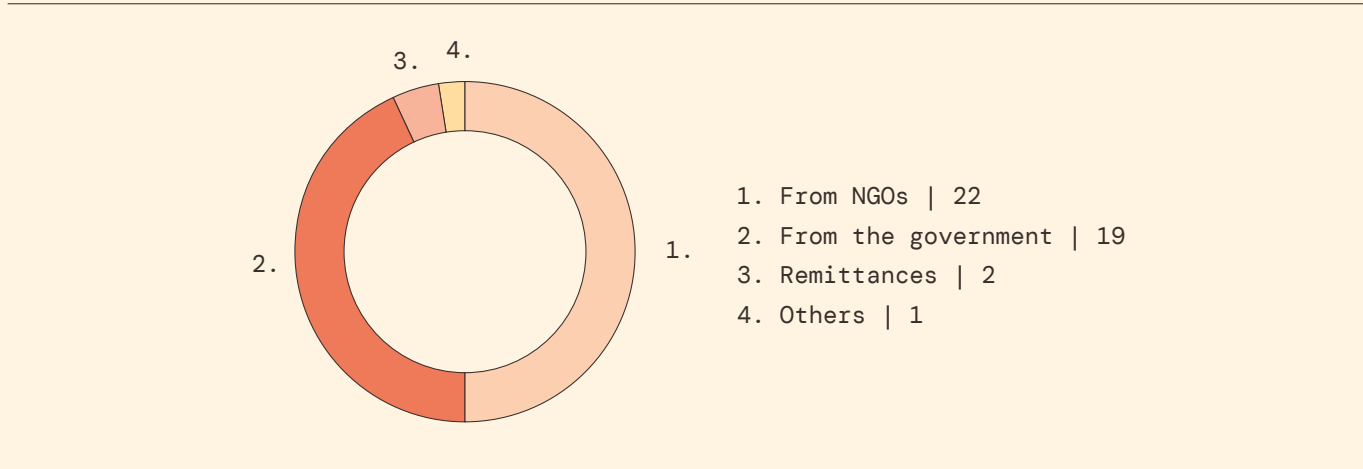


Figure 10: Young People 16-30 years old - Major Support



of destination. Travelling abroad temporarily is the aim of most young people interviewed for this report, as remittances are an object of desire among them. Nevertheless, such a journey demands abundant resources not readily available in the Arsi context. Internal migration then becomes the next best option.

Economic reasons

There was a consensus among the respondents on the sheer relevance of economic factors to migration. Three interviewees explicitly stated that “poverty” and “lack of economic opportunities” are the most evident reasons for migrating. In fact, different economic factors such as



poverty, lack of incomes, rising prices and unemployment were mentioned 12 times in the nine semi-structured interviews, followed by agricultural problems (9), climate change effects (7) and social factors (6) like mindsets, the idea of family success and peer pressure. According to our survey and FGDs, this perception was confirmed as remarked in the Amigna and Shirka group discussions, when participants stated that lack of sufficient income to live on was the main push factor.

In addition, according to the FGDs and the interviews, the lack of jobs and access to essential services are also significant push factors. The influence of these deficiencies was acknowledged by NGO, man and woman (Addis Ababa) when stating that, “if the population has access to education and other services, for example, medical services, health services, educational services or any other social services, they will not be forced to leave. So, let's assume that they are prepared and supported there. In that case, if they are with these kinds of services and avoid those kinds of challenges, they will stay there”. Three FGD and Local cooperative owner, Men, Arsi Robe highlighted the need to provide communities with “technical and

financial support” to help them to develop economic projects and obtain new income sources, making migration unnecessary.

From point of view of district government representative, man (Assala), “more development is necessary to provide the population with options to stay”. This means “more land and access to water” and, above all, “mechanised agriculture to transform the current agricultural system into an industry”. This vision of future agricultural development clearly aims to increase the reach and efficiency of some government projects, which specifically target women through cooperatives, but currently have limited resources. In fact, for this interviewee, the main factor that would stop people from moving would be the existence of “agroecology adapted to new rainfall patterns, temperatures and new productions” that would allow people to be food secure. International donor, man (online) also mentioned how sufficient resources, land, water and seeds are critical to people not abandoning their communities.

In addition, the young men in the focus group in Amigna widely commented that inflation and rising prices are affecting the

Figure 11:
Young Women 16-30 years old -
Living standard perception

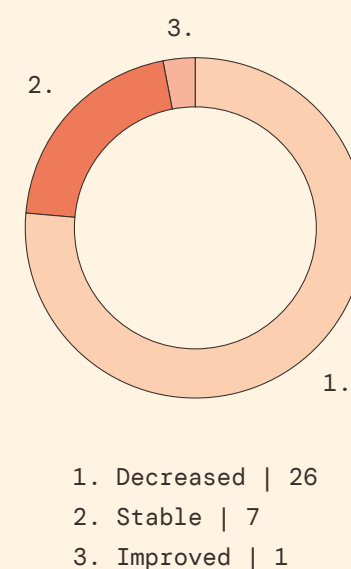
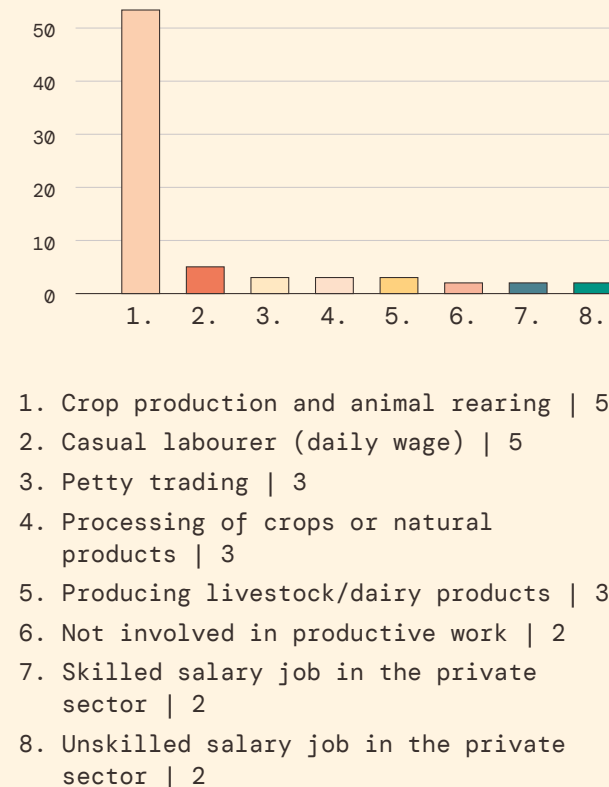


Figure 12:
Young Women and Total Youth
16-30 years old - Source of income



people of Arsi. In this regard, the young men commented on their perception that the main problem was “the increase in inputs” needed for agriculture. For their part, the young women highlighted the “prohibitive cost” of food and other products, which has made living standards more expensive and thus further distanced them from achieving sufficient income. For the FGD of young male returnees from Shirka, “the rising cost of living” was a factor in the region and throughout the country. Inflation has also impacted savings and credit cooperation making it the main reason for pushing people to move. For NGO, man (Assala), the reasons for the increase in prices were related to the consequences of the conflict in Tigray (sanctions, cost of war, displaced person camps) and, of course, the effects of food insecurity and the increase in grain prices

due to the Russian invasion of Ukraine (figure 11, 12).

The precarious situation of subsistence agriculture and livestock farming

An additional factor contributing to the impoverishment of Arsi inhabitants is the lack of available land in a region where a significant part of the population relies entirely on agriculture for survival. As man 6 (Dodota) remarked, for many people, “their livelihood is based on agriculture, and they are not in the habit of engaging in other activities outside agriculture”. Nowadays, land scarcity issues, affecting mainly young men and women according to our survey and literature review, have increased, owing to a combination of: “high population growth and a severe shortage of arable land”, as

Figure 13: Total 16-59 years old - Access to farmland

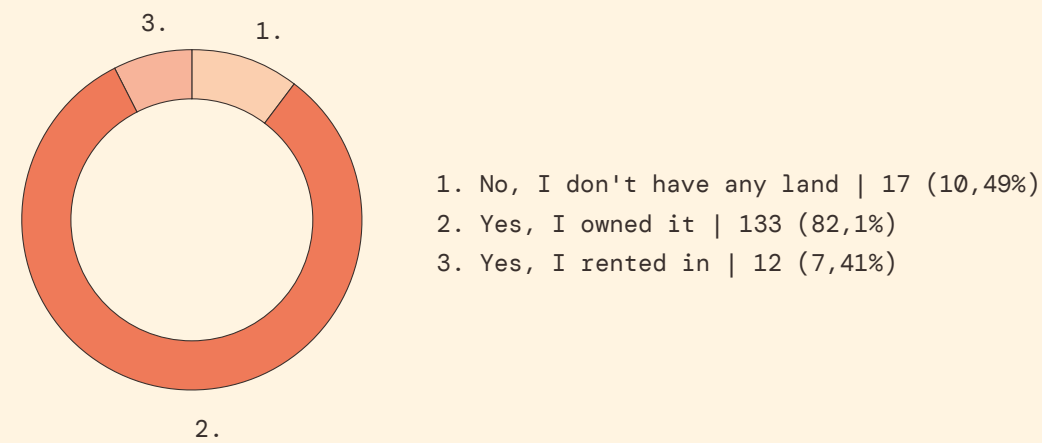


Figure 14:
Young women 16-30 years old -
Access to farmland

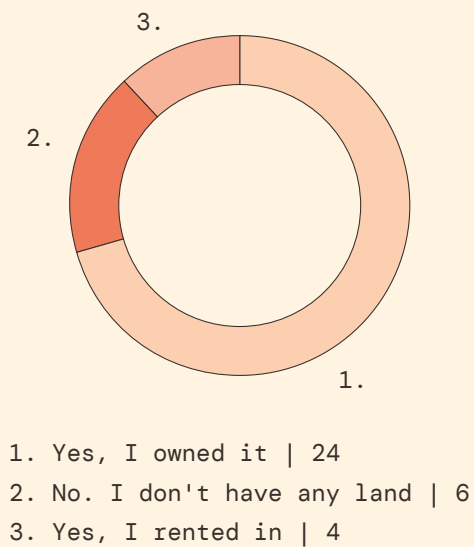


Figure 15:
Total Young People 16-30 years old -
Access to farmland

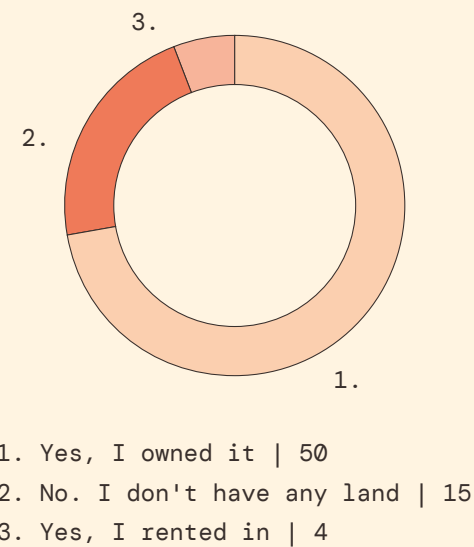


Figure 16: Young women 16-30 years old - Cultivated land

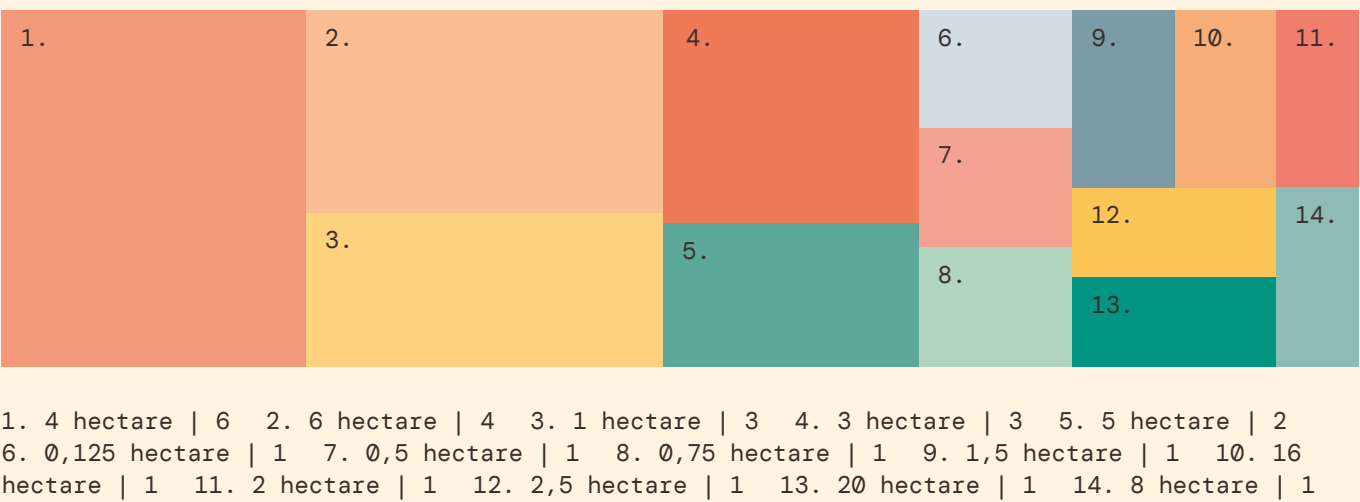


Figure 17: Young people 16-30 years old - Cultivated land

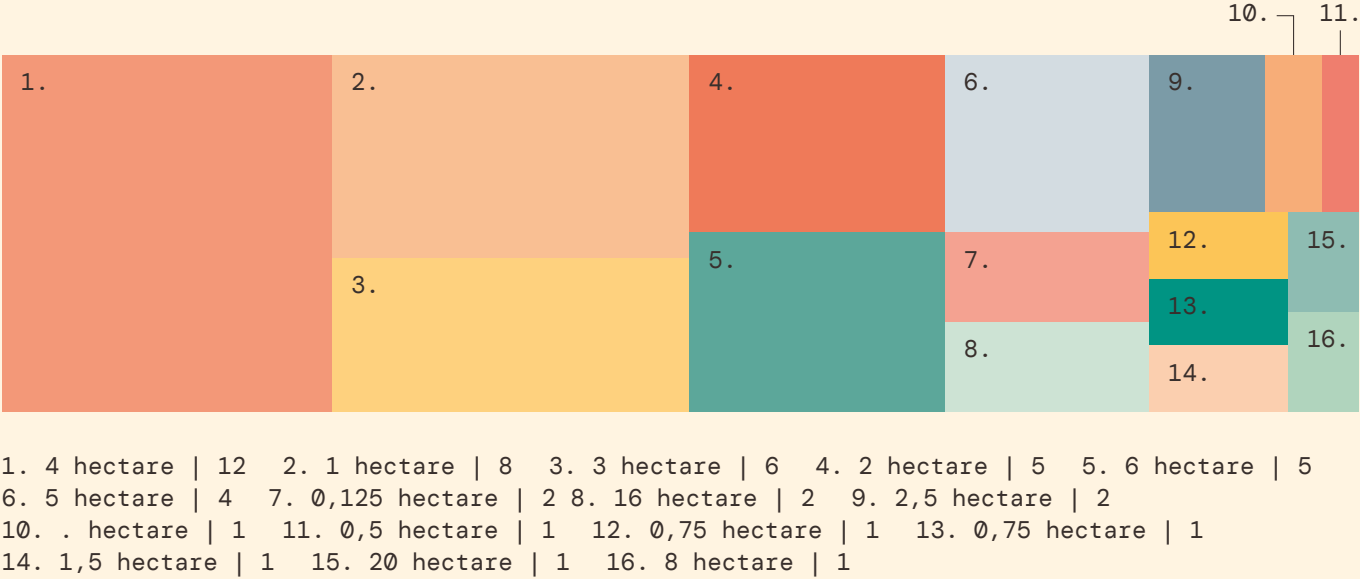


Figure 18: Young people 16-30 years old- Main livestock

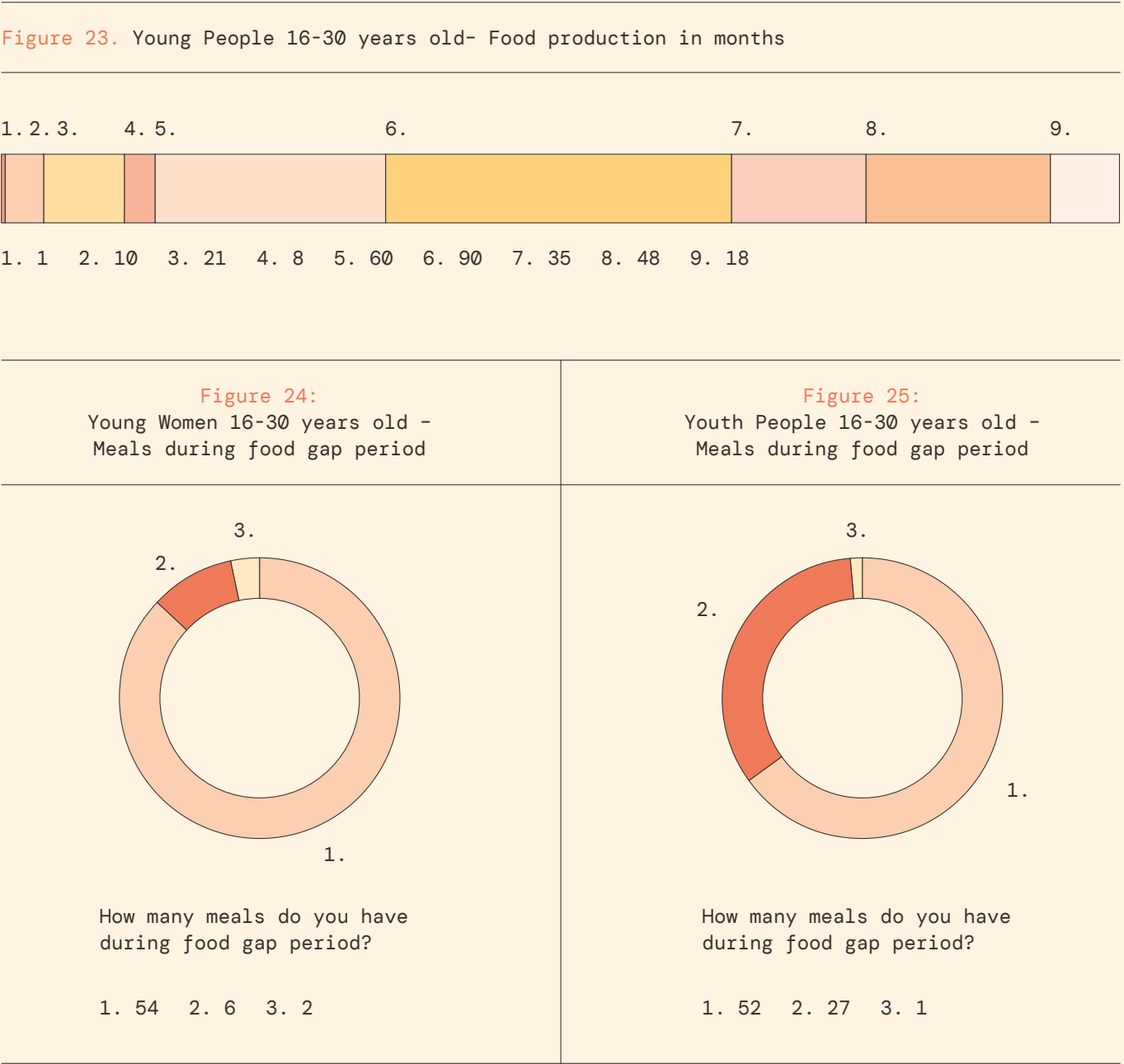
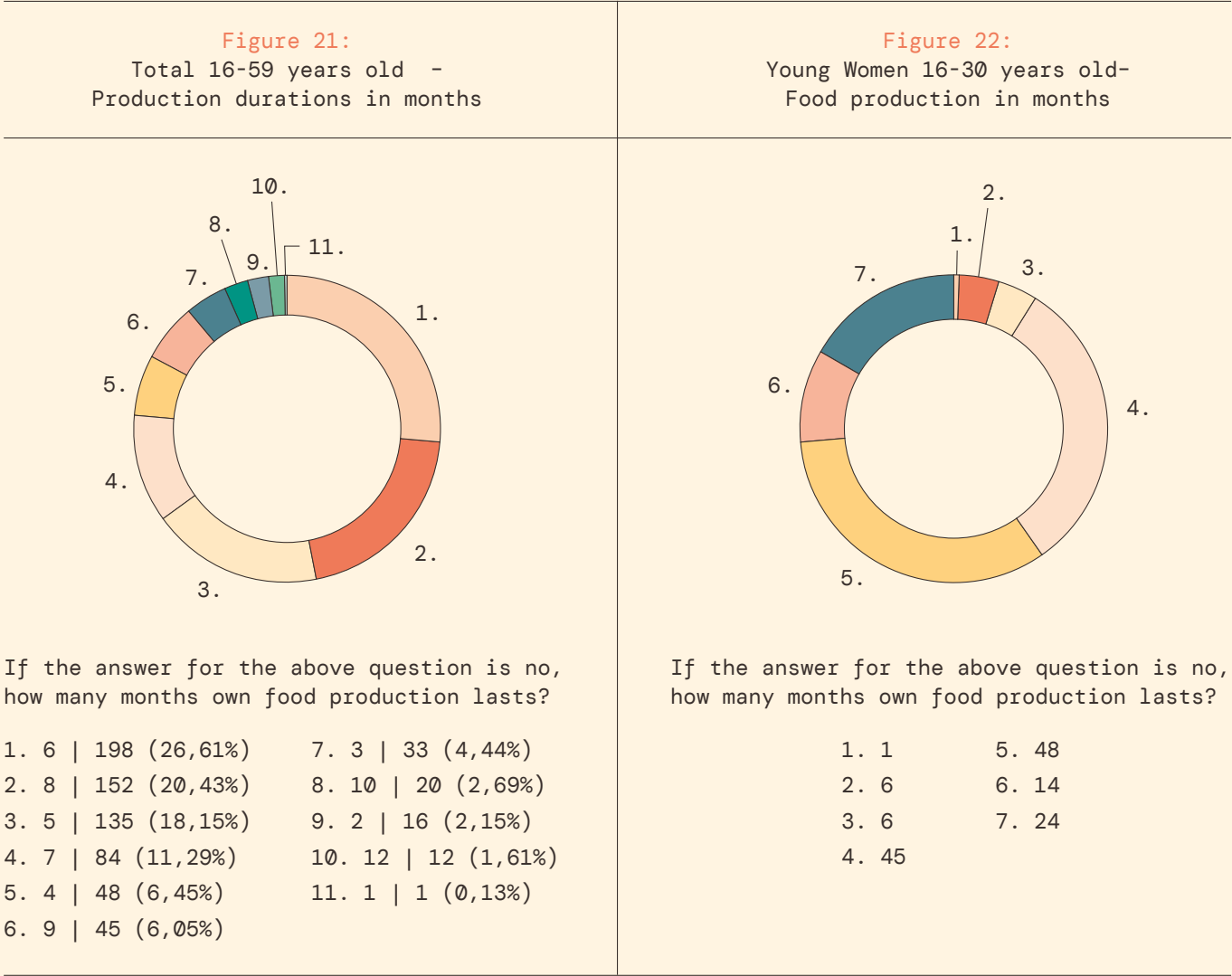
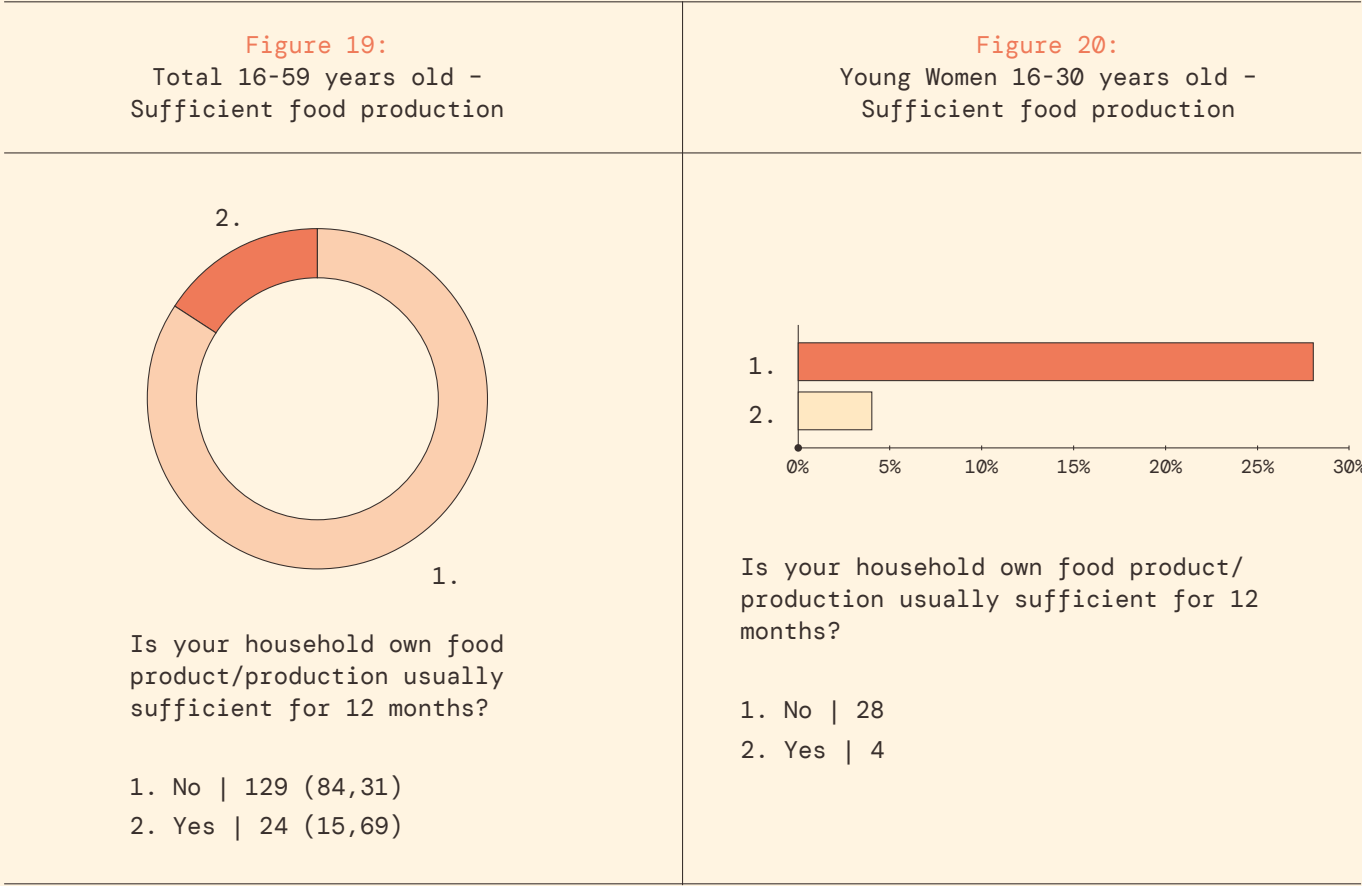


noted by regional government representative, man (Addis Ababa), based in his day-to-day routines (figure 13, 14, 15).

The primary data of the present research showed that although 82% of the population has access to land, there are differences between age and gender. While 90% of men aged between 31 and 60 have access to land, only 86% of adult women in the same age range do. In the case of people between 16 and 30 years of age, the difference between men and women is 74%

to 70%, according to our data collection. Although these figures do not seem particularly worrying, it should be noted that the amount of land possessed by each family is minimal, the most common being the equivalent of 0.25 hectare, and having to produce enough food for five to eight people. Moreover, most (94%) of the 166 surveyed Arsi people do not have external irrigation (figure 16, 17, 18).

The difficult conditions for farmers have become even harsher due to climate change



effects and environmental degradation. As a governmental officer in the Arsi area recognised, drought and rainfall scarcity have hit hard the already fragile crop and livestock production, leading to food insecurity. The survey confirms this statement, as 88% of people do not have enough food production to cover 12 months, having only five to six months' worth. Because of this, in periods of food deprivation, 71% of people have to reduce their meals to only two a day, with significantly more young people (74%) than adults (58%) and even more young women (87%) than young men (65%) having to do

this. The FGD mentioned in Amigna this trend, where young women said they “did not even have enough to eat”. They presented the case of pregnant women who have to eat whatever food is produced, without access to a balanced diet, yet another deficiency in their pregnancy. In this sense, they pointed out the lack of adequate medicines or good maternity services due to the lack of infrastructures. All these maternity-related shortcomings further increase the need to find other sources of income. In fact, it has become another decisive push factor, as some interviewees acknowledged (figure 19, 20, 21, 22, 23, 24, 25).

Pull factors

According to available statistics, Ethiopian migration has three main routes: Europe and the USA, where people with more possibilities and funds go; Saudi Arabia ahead of other Arab countries; and, thirdly, South Africa. These last two routes are mostly irregular. International migration is attractive because it offers a greater possibility of sending remittances to families and more economic options. According to our research, in Arsi, we found more cases of migration as a need to increase family income rather than as “dream projects”. As far as internal migrations are concerned, these are motivated more by pressure on scarce land from large families, which forces them to move to nearby capitals, in the case of Arsi to Adama and other large cities in the area. According to our survey data, for Arsi people, the preferred international destinations are Arab countries due to the high demand for low-skilled labour in the case of men, and domestic workers in the case of women. Moreover, these countries share the same Muslim religion as a significant proportion of the Oromia population. According to the 2007 population and Housing Census, the Oromia population declared themselves to be Muslim (47.5%), Orthodox Christian (30.5%), Protestant (17.7%) and Catholic (0.5%), among other religions⁴.

As mentioned above, among the small amount of information available on Ethiopian migration, standing out is the



estimate of 839,000 Ethiopians who have moved abroad in the last five years – according to the Labour Force and Migration Survey conducted by IOM and the Ethiopian Central Statistical Agency in 2021⁵. More importantly, most of them were young (78% aged between 15 and 29), and about 31% travelled to Saudi Arabia. Other popular destinations were South Africa, the United Arab Emirates, the USA and Yemen.

As movement from Ethiopia to the Gulf countries is largely irregular, Ethiopian migrants often experience great danger, being exposed to various risks on these journeys. The survey revealed that nearly 51,000 migrants are missing while migrating⁶. Many more are believed to have perished or disappeared in route to their destination. In addition, the survey revealed

5. <https://ethiopia.iom.int/news/over-800000-ethiopians-migrated-abroad-past-5-years-labour-migration-survey-finds>

6. <https://ethiopia.iom.int/news/over-800000-ethiopians-migrated-abroad-past-5-years-labour-migration-survey-finds>

that the internal migrants in the government account reached a total of 32.2%⁷, with the majority being women migrating from rural to urban regions between 2017 and 2021.

These partial data confirm different migration routes (Europe and the USA; Saudi Arabia and Arab countries; and South Africa). These last two routes account for most of the irregular movements made by adults aged between 18 and 25, according to a 2017 Maastricht University study⁸. According to IOM, “university educated and wealthy Ethiopians head to Europe and the United States of America”⁹. At the same time, “young school dropouts with few economic resources migrate to the Middle East”. Located close to Ethiopia, Arab countries have a high demand for “low-skilled labour, such as domestic workers, construction workers, and agricultural workers”. In addition, Muslim families often prefer to migrate to Arab countries because of their religious affiliation. While official labour migration statistics show a feminisation of Ethiopian migration, especially to the Middle East, irregular migration flows are reportedly dominated by men.

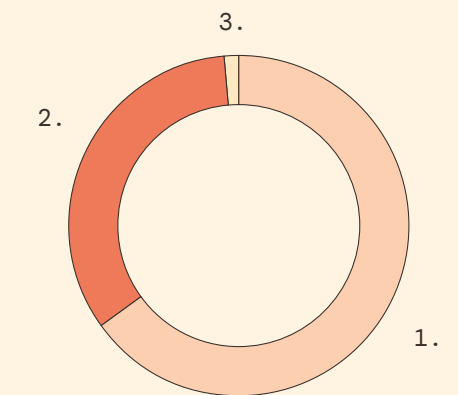
On the other hand, migration within the country is driven by different factors. Migration within the countryside is caused by demographic factors and increased pressure on land. In contrast, rural-urban migration is “skill-driven and linked to

7. <https://www.thereporterethiopia.com/11849/#>

8. <https://www.merit.unu.edu>

9. <https://publications.iom.int/books/they-snatched-me-my-own-cryf>

Figure 26:
Young People 16-30 years old -
Where did your family member migrate to?



If yes, where did they go?

- 1. Arab countries | 21
- 2. Other part of the world | 1
- 3. Within Ethiopia | 1

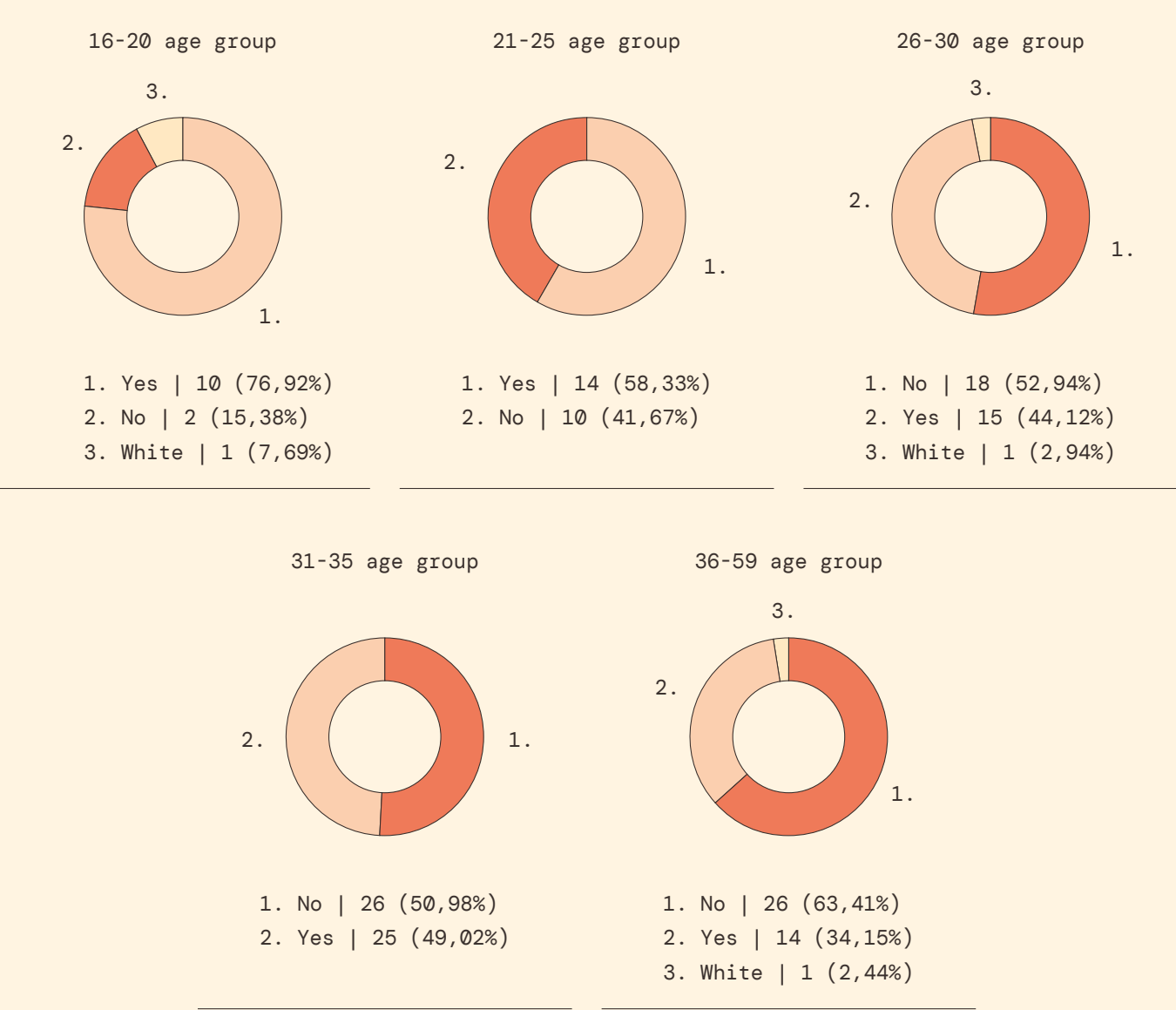
higher returns to education in urban areas”¹⁰. Internal migration, in the case of the Arsi zone, especially to the regional capital of Adama and other cities, offers less scope for improving the lives of families (figure 26).

In Arsi, according to our survey data, about half of the respondents had a family member who had migrated to Arab countries because of their demand for domestic workers, low-skilled labour, a shared religion and the possibility of escaping practices such as early marriage. As such, 41% of family members migrated during the last five years. Arab countries (67%) were the preferred destination rather than internal migration (29%), with one or two family members going abroad. This trend corresponded with comments in the FGDs and interviews, where it was assumed that international

10. <https://documents1.worldbank.org/curated/en/428111562239161418/pdf/Internal-Migration-in-Ethiopia-Evidence-from-a-Quantitative-and-Qualitative-Research-Study.pdf>

4. https://web.archive.org/web/20120604045256/http://www.csa.gov.et/pdf/Cen2007_firstdraft.pdf

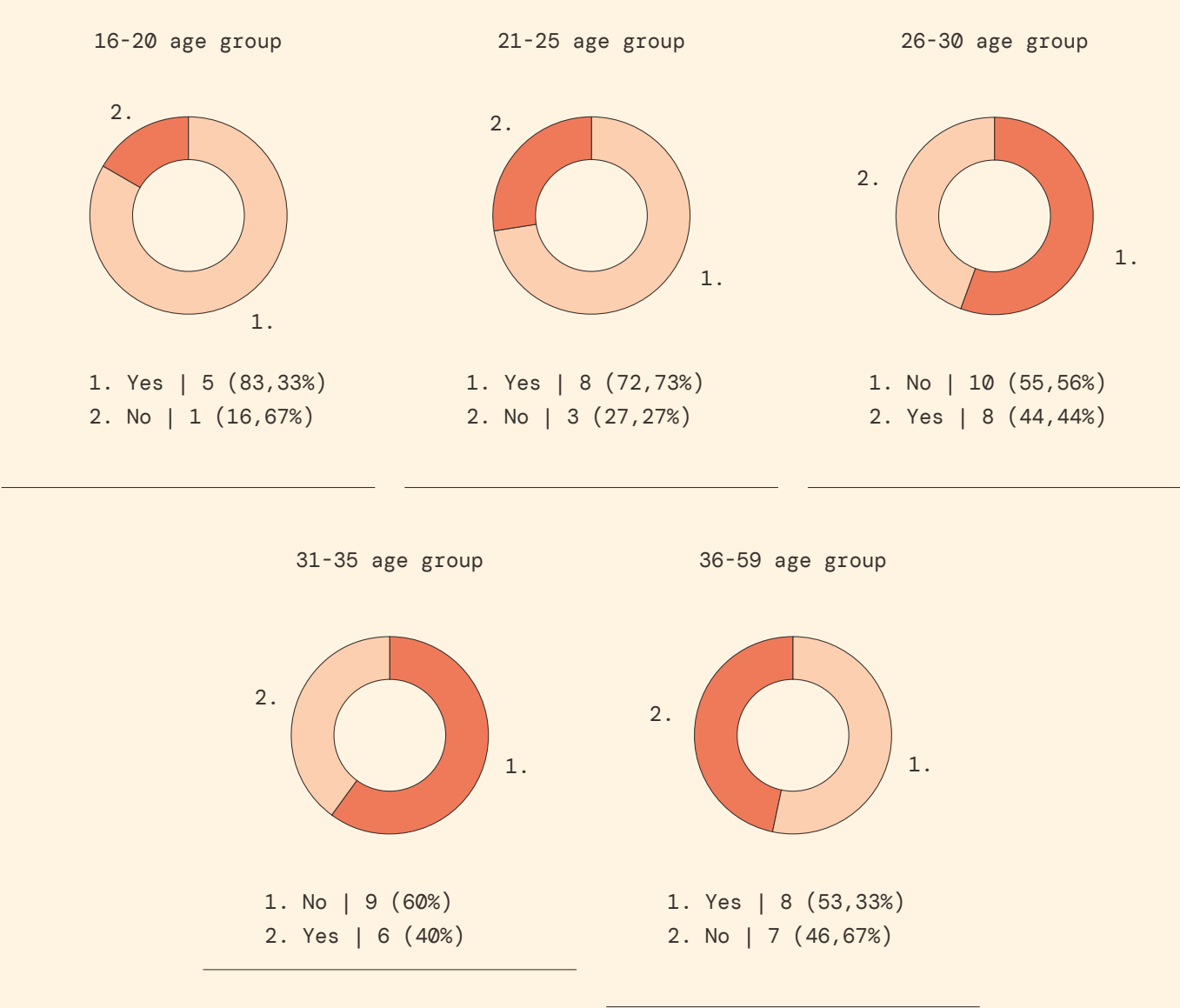
Figures 27: Intention to Migrate



migration could mean much more income for families than internal movement, more related to coping strategies or relieving family expenses by sending some people abroad. It also highlighted the impact of some successful examples of remittances and the triumphant return of some migrants, mostly women, who “change their family life by going to an Arab country”, working as domestic workers, as stated by NGO, man and woman (Addis Ababa). In addition, the common religion they share with Arab countries is a pull factor for the Ethiopian Muslim communities in Arsi and Oromia. But while the benefits of going abroad outweigh those of moving internally,

“travelling abroad is very expensive,” so many families cannot afford it. Moreover, it is essential to note that women's domestic work in Arab countries was a vital pull factor in deciding the person in the family who migrated and their regular or irregular migration. Furthermore, we find some aspirations for change as NGO, man and woman (Addis Ababa) highlighted the possibility of changing some cultural practices, such as early marriages, which could offer women more opportunities to decide their destiny. Finally, there is the relative stability of Arsi compared with “the existence of instabilities in other parts of Ethiopia”.

Figures 28: Women - Intention to migrate



Leaving home in the migration process

Most young people in Arsi consider migration as a future option. Others root their decision for a future in the area in the desire to remain close to their family, land, and other cultural factors. In any case, it should be noted that the risky decision to migrate is taken as a family decision.

Arsi youth aim to migrate

According to the survey conducted for this report, most young people in Arsi considered migrating as an option in the future. Younger

people were much more willing to move than older people. Thus, there was a difference in the age range around the decision to leave. The youngest in the survey (16-20 years old) were the most likely to leave (76%), followed by those aged 21-25 (58%), and a majority were in favour of the decision not to move in the following two age ranges (26-30 and 31-35 years old). Finally, 76% of the older respondents (aged 36-59) were inclined not to emigrate. Moreover, among younger women (16-20 and 21-25), there was a higher proportion with an intention to move (83% and 72%, respectively). In comparison to young respondents, only 53% of women and men aged between 36 and 59 were willing to

Figure 29: Young women 16-30 years old - Reasons not to migrate

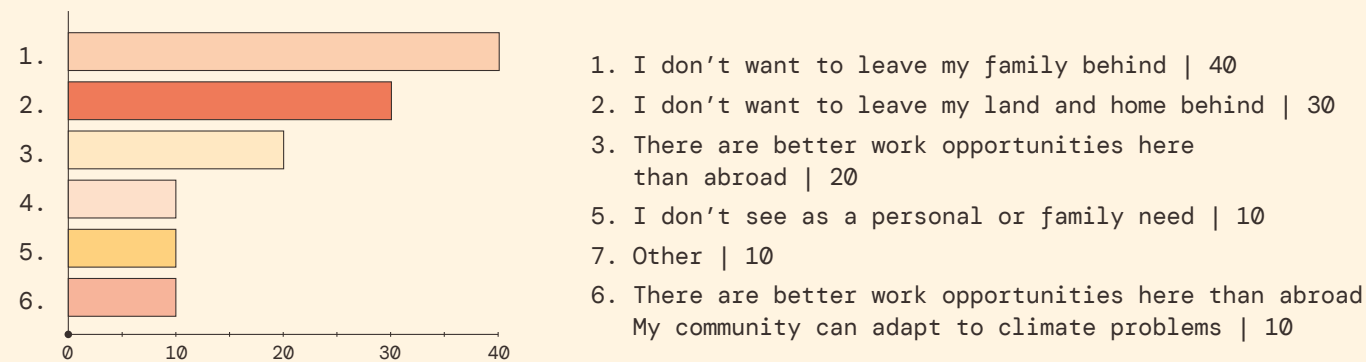
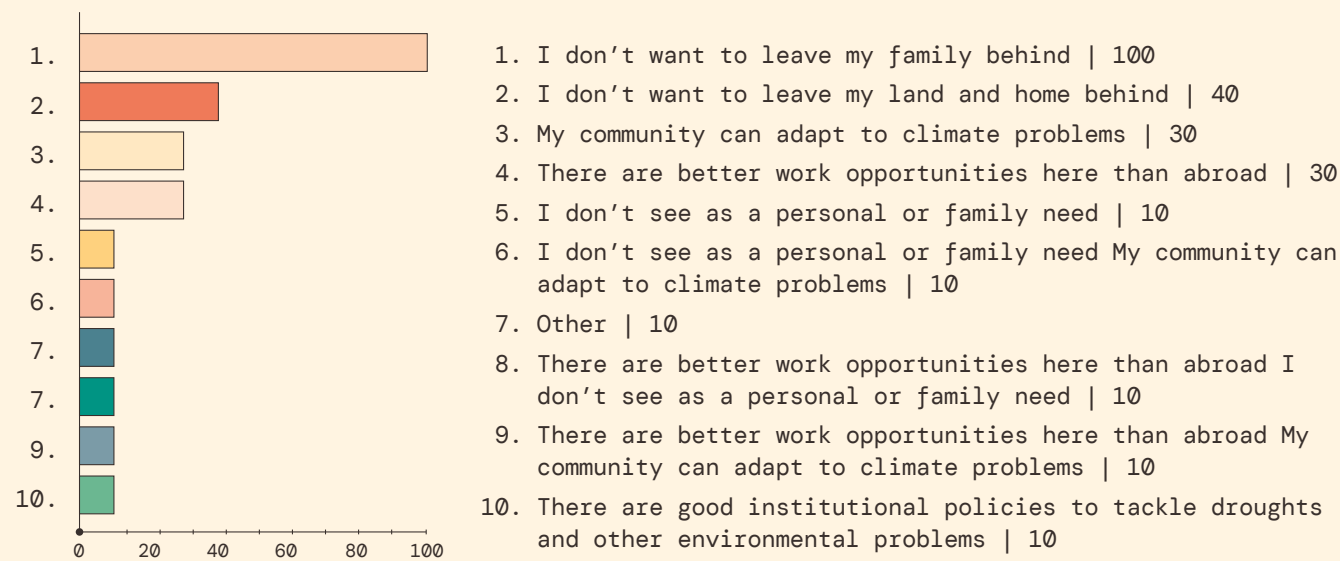


Figure 30: Young young people 16-30 years old - Reasons not to migrate

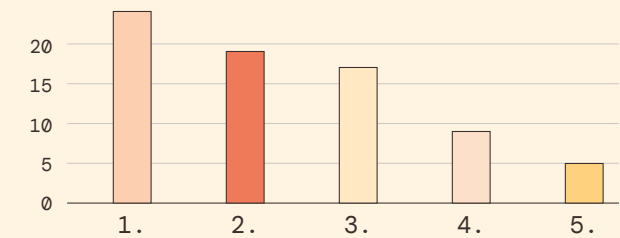


migrate of the total number of people in our survey, and there was almost a tie between those who did not want to emigrate (50%) and those who intended to move (47%) (figure 29, 30).

On the other hand, some related rootedness factors explain the reasons for staying, such as family concerns and respondents' aspirations to live on their land. According to our findings, respondents had reasons for remaining because they did not want to leave their family (29%) or their land (24%). According to our findings, surveyed adult men choose not to leave because they do not want to leave their motherland as a first choice, while young people in general

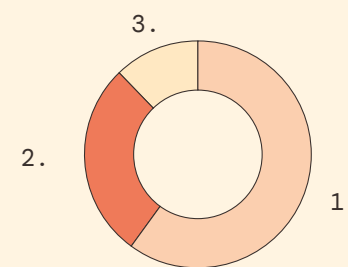
(38%) and women (adults at 47% and young women at 33%) were more concerned about keeping family bonds. Among the factors of rootedness, we found many cultural references in our focus groups and interviews – firstly, the strong desire to remain close to their families and communities. Secondly, as NGO, man (Assala) commented, the world vision of Arsi inhabitants promotes staying in the homeland: “Ethiopians are unwilling to move to other areas because they think where we were born better than any other area. In the Oromo culture, we have a saying that land is part of humanity. If you have land, you have to stay. You have to stay there without migrating to another area.” Also, age is another factor in rootedness.

Figure 31: Young women 16-30 years old - Triggering factors to migrate



1. Lack of income | 24
2. Lack of job opportunities | 19
3. Failure of crops and loss of livestock due to drought, floods, storms, etc. | 17
4. Increased sense of insecurity due to political violence or armed conflict | 9
5. Lack of educational opportunities | 5

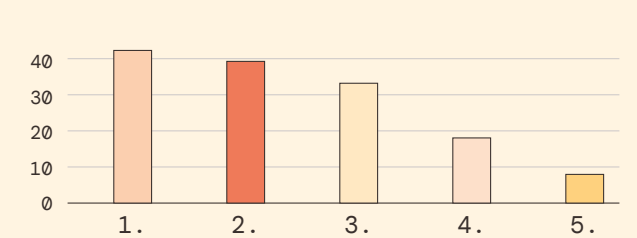
Figure 33: Young women 16-30 years old - When a family member migrates



1. When the family income is not enough to cover the daily expenses | 15
2. When the crops fail | 7
3. When the family need new sources of income for investing in new projects (home improvements, work, family needs...) | 3

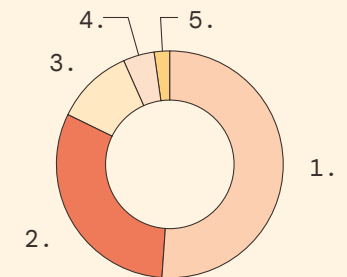
NGO, man (Dodota) noted that older people prefer to stay on their land and in their communities, even when they suffer harsh economic conditions. Although older people are more likely to prefer to stay on their land, there is a widespread perception of a preference to remain at home, according to our quantitative and qualitative findings. As NGO, man (Dodota) and NGO, man (Assala) cited, in their opinion, the mentality of staying

Figure 32: Young people 16-30 years old - Triggering factors to migrate



1. Lack of income | 42
2. Lack of job opportunities | 39
3. Failure of crops and loss of livestock due to drought, floods, storms, etc. | 33
4. Increased sense of insecurity due to political violence or armed conflict | 18
5. Lack of educational opportunities | 8

Figure 34: Young people 16-30 years old - When a family member migrates



1. When the family income is not enough to cover the daily expenses | 23
2. When the crops fail | 14
3. When the family need new sources of income for investing in new projects (home improvements, work, family needs...) | 5
4. Peer pressure | 2
5. Lack of job opportunity | 1

in Oromia is essential and adds to the feeling of taking care of their families and lands.

Family decision

Despite the profound love for their land, as seen through this report, migrating becomes the right thing to do when the personal and family's present and future wellbeing is at stake. According to the survey conducted for

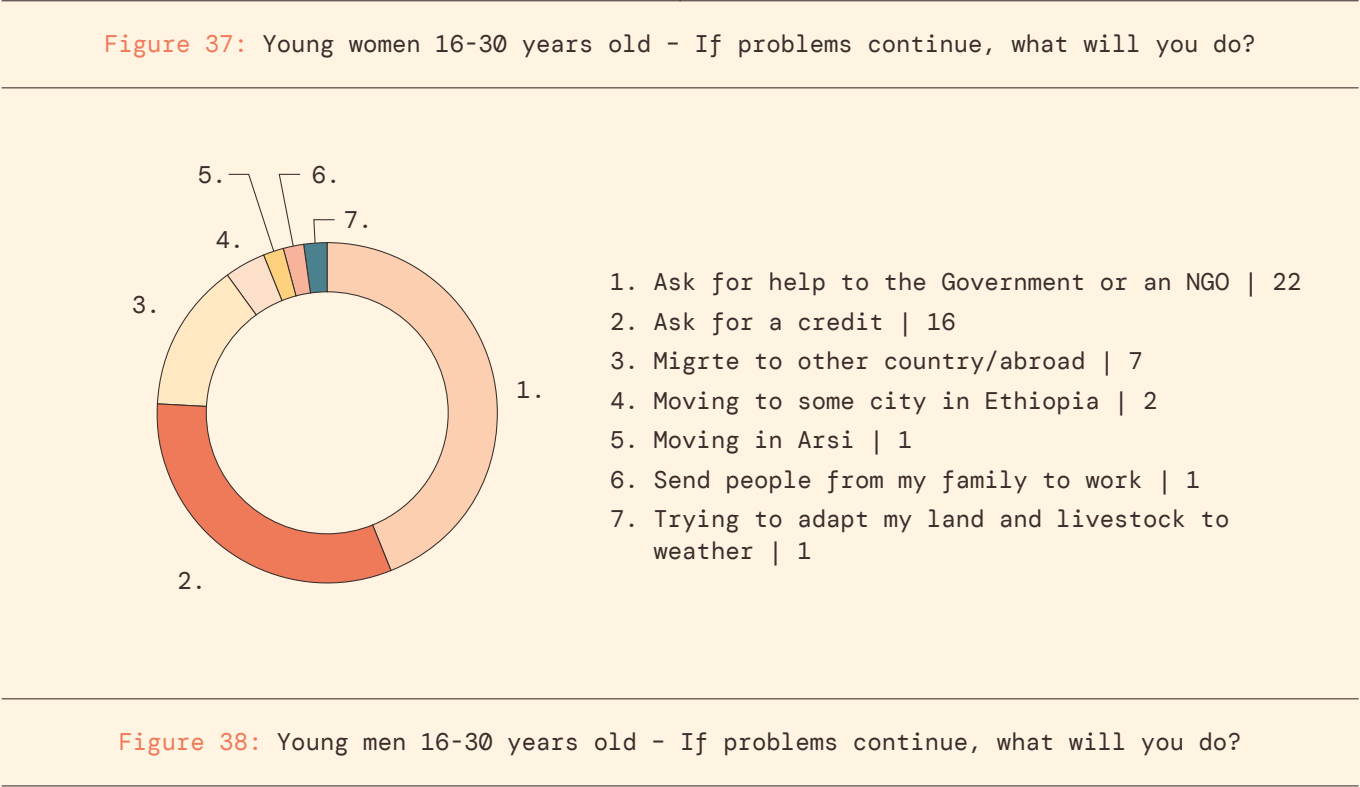
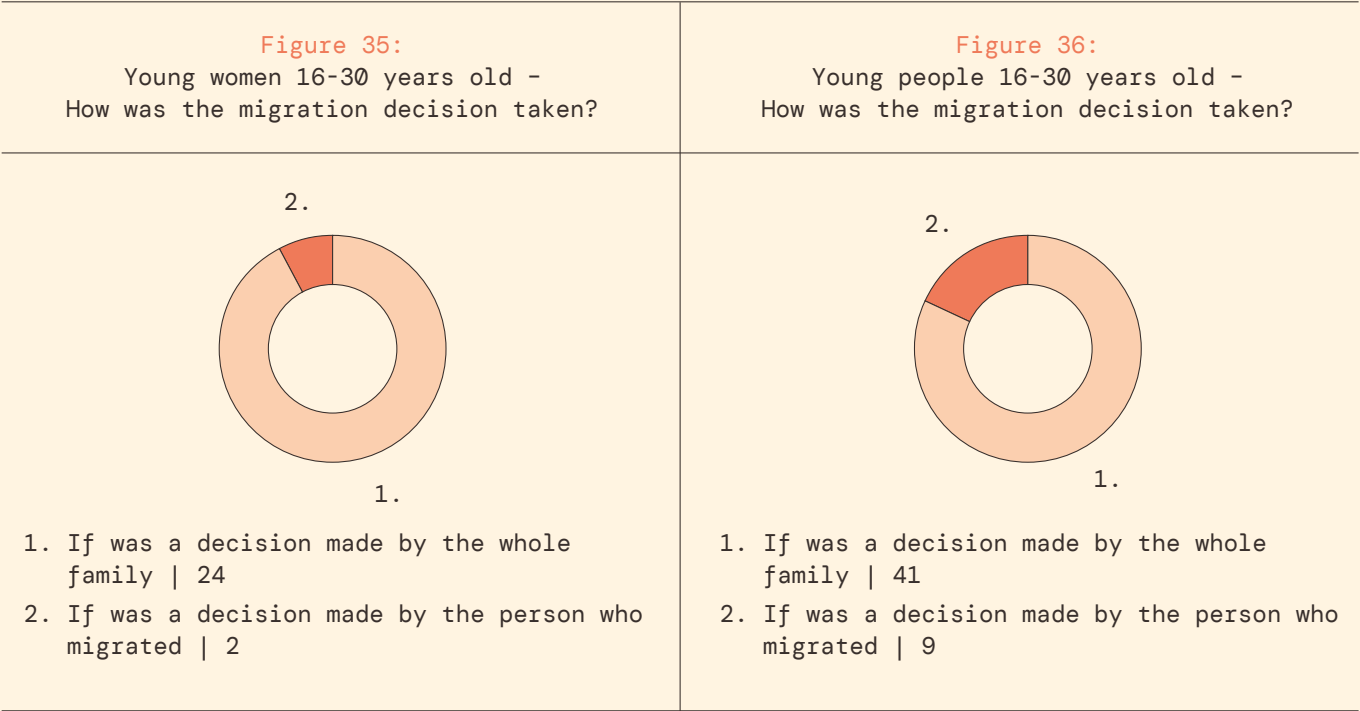
this report, the lack of a minimum income to survive (50%), followed by the failure of the harvest (25%) are the primary triggers of migration. In the case of young women, these causes have a higher impact, as 60% decide to leave due to a lack of minimum income and 28% following a crop failure. In any case, it should be recalled that the decision to move is familiar not individual, according to our sample.

No matter the trigger, migrating is usually a family issue. Migration is conceived as a group project; hence the journey of one of its members is financed by all. In the Arsi Robe FGD, one of the women detailed how her family invested in her journey using the money obtained from selling a horse, an essential asset for the family economy, to purchase her flight. Unfortunately, sometimes those initial resources are insufficient, and migrants must find additional ways to pay for their journey. That was the case of a woman from Shirka, who said she had to use the salaries abroad to honour the debt to the intermediaries who allowed her to stay in the country. Not only the expenses related to a decision to migrate are shared, but profits as well. Remittances cover family needs and, in some successful cases, investment in businesses that benefit the whole group. As noted in the FGDs, remittances are used to cover day-to-day family needs (such as the purchase of assets

for agriculture, urgent food or family needs), and, in some successful cases, are invested in businesses that benefit the whole group. In the latter case, returnee women from the Arsi Robe FGD spoke of a returnee woman who was able to invest her remittances in a new house and new businesses. In comparison, one of them invested part of her remittances in opening a coffee shop. Although both men and women (85%) rely on their family members to plan migration, the survey revealed that it is more common among young women (92%) to seek support and advice (figure 35, 36, 37, 38).

A risky decision

Migration is often challenging, as expressed by the FGD of men and women returnees. Three men and two women of the Shirka FGD mentioned that they suffered imprisonment as irregular workers and, when they were able to work, several people of these FGD felt mistreated and exploited compared with their work at home. For one woman of the discussion group in this district, the difference with men was evident, as women were paid less than male migrants and suffered sexual abuse by their employers in Arab countries. For the men in the Shirka and Dodota FGDs, conditions were very extreme, not only for those imprisoned but for everyone in connection with the conflicts and wars in countries such as Yemen.



As IOM notes, “opportunities and risks for migrants are affected by gender norms”¹¹, in terms of family roles and responsibilities, opportunities to work abroad, socio-cultural norms and patriarchal traditions, the type of work women tend to do, and the risks of sexual violence during transit involving the family's preference for train travel, in contrast to “male migrants who tend to travel irregularly on foot”. In addition, women may also be victims of trafficking during their migratory journeys¹². Regarding information on the conditions of migratory routes, it should be noted that a federal NGO, specialised in women's empowerment and interviewed in this research, offers specific training for women in regular migration to Arab countries. In their prevention programmes, they regularly offer women planning to travel training in skills, household chores and legal information.

Perceptions around the decision to migrate

Migration is, by definition, a voluntary process. However, this broad concept conceals several nuances. In the Focus Group Discussions and Key Informant Interviews, migration was described as an unwanted but necessary option to earn more income, especially for young people. The young women from Amigna reported the possibility of migration because of family pressures due to the lack of an alternative. This was the most common response in the Shirka FGD from both men and women, linked to coping

11. <https://publications.iom.int/books/they-snatched-me-my-own-cry>

12. Ibidem

strategies once their fragility is affected by changes in rainfall patterns, lack of land productivity due to land scarcity, or family “sufferings”, as the Shirka young women commented.

For others, migration is the option when everything else fails. That was the case of a returnee woman from Arsi Robe who, supported by her family, decided to undertake regular migration as a domestic worker once her attempt to study at university was not successful. Lastly, for other people, migrating is a desirable temporary project that will provide them with the resources needed to improve their lives and those of their families. In addition, woman 3 and woman 5 (Arsi Robe) expressed negative perceptions of migration. They underlined that young people migrate because of a mentality that emphasises that they will have a better life outside rather than trying personal and community projects in the country. These perceptions focus on the decision not to pursue work options in their communities.

How migration projects affect living conditions in the Arsi zone: lessons from returnees

Cross-border migration significantly impacts the lives of Arsi zone inhabitants, but not always in a good way. Returnees from Saudi Arabia, Somalia and Yemen – both men and women – tell stories of success and failure that very often include: a high dose of suffering due to the harsh journey conditions; mistreatment by employers and foreign authorities; and the difficulties



faced back home during reintegration. Their narrations are, currently, one of the few sources available to understand how migration affects living conditions in this region.

Information regarding this group of people is scarce and highly fragmented. There are no available statistics on those who voluntarily decide to return. Only Saudi Arabia provides some information regarding the number of deported immigrants and people invited to leave the country due to their irregular status. In 2013, for example, the kingdom deported about 170,000 Ethiopians. Four years later, authorities launched a campaign granting all irregular migrants a 90-day amnesty to leave the country without facing sanctions. IOM estimates that, back then, about 340,000 people returned to Ethiopia. The attempts of Saudi authorities to expel irregular migrants have continued since then. According to the UN, in 2019 alone, 120,000 people were deported from Saudi Arabia to Addis Ababa¹³. Recently, in May 2022, 25,000 Ethiopians were returned by Saudi Arabia following an agreement

13. <https://www.un.org/africarenewal/news/coronavirus/new-study-ethiopian-migrants-gulf-finds-many-unaware-dangers>

between the governments of Ethiopia and Saudi Arabia, as IOM remarked¹⁴. This agreement is expected to allow the return of 75,000 more people by the end of the year. As for the Arsi area, complete statistics are also unavailable. However, officials and NGOs reported some psychosocial and training programmes with returnee women and men, especially in the Shirka district.

The situation of male and female migrant returnees to Ethiopia, specifically Arsi in Oromia, is one of the most severe regarding humanitarian needs, social reintegration and life experience for their communities, according to IOM¹⁵ and the testimonies compiled in our three returnee FGDs. Nevertheless, through their experiences expressed in the FGDs, we learned about the essential role of remittances in covering the needs of migrants' families. Remittances are often used to cover household expenses and replacing previous sources of income that have been affected by climate change. In some reported cases, however, their use is even more effective, financing projects that reduce

14. <https://www.iom.int/news/hundreds-migrants-return-ethiopia-ioms-first-voluntary-return-flights-yemen-2022>

15. <https://publications.iom.int/books/they-snatched-me-my-own-cry>



Male returnees are prone to mental health problems, as they blame themselves for not being able to support their families

exposure to the effects of climate change, such as irrigation systems or introducing more drought resistant crops. They help to start and maintain economic activities without relying solely on weather conditions but are only beneficial if the new businesses are sustainable. In this respect, funding is needed. Thus, woman 3 (Arsi Robe) called for the extension of individual credits to groups given their good performance. At the same time, local cooperative owner, man (Arsi Robe) and zone government cooperative, woman (Arsi Robe) stressed the difference in having finance for small agricultural or livestock cooperatives: the Dodota FGD request this. And this also highlighted the experiences of using remittances discussed by the Arsi Robe FGD: running coffee shops, improving their land's agricultural capacity and houses. "Ethiopians living abroad sent 4.2 billion USD in 2021, according to the Ethiopian Diaspora Service (EDS). The annual remittance figure has shown a significant increase from the amount Ethiopia received in the previous year, which was 3.6 billion USD". However, remittances cannot replace the action of the State, which is responsible for designing and implementing local and national adaptation plans. They only complement broader measures and strategies¹⁶. Sending money home can be risky for migrants and particularly for women, as they rely heavily on their families and partners. As some returnees from the Arsi zones recognised, as a family project, the success of their journey depends on their

husbands' commitment to it. Those who remain at home are responsible for investing remittances on something other than urgent needs, such as agricultural supplies, irrigation systems or education fees. In some cases, men remain faithful to their promises and make good use of the money, but in others, those resources end up paying for personal expenses. As one of the interviewed women confirmed, men leaving their wives while they are abroad and taking the money is also a possible scenario. Being abandoned by an irresponsible partner and losing in the process the hard earned money is just one of the many risks faced by migrants. Facing abuse from an employer, illness, deportation and imprisonment are constant threats. The three latter events are particularly frightening, as they imply an abrupt end to the journey. Migration could be a temporary project or it could follow a circular plan for the Arsi people. They may go out and come back several times, a fact that will have to be corroborated by future reports dedicated to this issue. A migration project may be completed in a few years after obtaining the resources needed to improve living conditions back home.

Nevertheless, this dream does not always come true, sometimes due to the reasons above and events in the host countries. Two returnee women were forced to leave Beirut during the social and economic turmoil caused by the port explosion in 2020. In such cases, reintegration can be a complex process in which the return is involuntary. Men are prone to mental health problems, as they blame themselves for not being able to support their families. Women also suffer similarly but are also exposed to

sexual abuse by their employers and are often paid less than men. Returnees often need psychological and economic support and serve as "loudspeakers" of the situation abroad and during travel. In general, they feel they have failed in their family projects, as many returned without funds or even with some debts. One woman from Robe felt isolated, deciding not to leave her house upon her return. Neighbours and NGOs helped others by trying to provide them with a livelihood and psychological assistance.

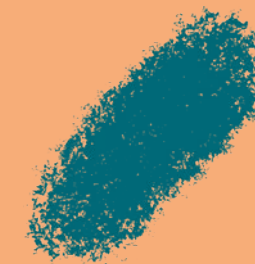
For those forced to return before completing their project, resuming it is not always their first option. Some men and women became spokespersons for the problems abroad and decided not to emigrate again. Others preferred not to migrate again to avoid growing risks, such as conflicts in transit countries. But they were again considering relocating in the absence of better socio-economic and environmental conditions. In this regard, one woman from Shirka said she was thinking of moving internally to Addis Ababa to earn money and finance further international migration. Others said that even if they managed to send money, their families had to spend it on urgent needs, not on improving their situation, so they were thinking of returning abroad again. Although beyond the scope of this study, it should be noted that returnee migrants have suffered severe human rights violations on route, which have even caused the death of many of them. This fact, added to their reintegration difficulties, presents us with another side of the migration process that brings into question whether it is the right path as an adaptation mechanism to face the challenges posed by climate change.

16. See Musah-Surugu, Issah, AHENKAN, Albert and BAWOLE, Justice "Migrants' remittances. A complementary source of financing adaptation to climate change at the local level in Ghana" International Journal of Climate Change Strategies and Management Vol. 10 No. 1, Vol. 10, No. 1, p. 1. Management Vol. 10 No. 1, 2018, NAIK, Op.Cit.

National and international socio-economic and climate change policies



This section lists institutional policies on socioeconomics, migration and climate change, particularly in Arsi and elsewhere in Ethiopia. It includes only those policies that were highlighted in the nine qualitative interviews. However, it would be useful to the purpose of this research to understand the impacts of climate change on migration from Arsi and to make recommendations at this stage. It may be the object of further research in the future.



The coping strategies adopted, especially at the individual and household levels, have been presented above. Although it is necessary to underline that the responsibility for adaptation to the climate crisis lies with states, but they can count on the support of the international community, as recognised in the Paris Agreement, to which Ethiopia is a signatory.

The following is a compilation of those policies implemented by Ethiopian institutions, international organisations and NGOs. The compilation is drawn from interviews and FGDs. During our research, we asked about the impact of socioeconomic policies on climate change implemented by different branches of government, international donors and NGOs. We verified two main aspects: the different institutional orientations and the difficulties for these policies to have a real impact or even to be known by some of the most fragile populations. According to the regional and

zonal government and international donor key informants, a list of key policies adopted by the federal government to address climate change, especially regarding adaptation and people's resilience. A cross-cutting strategy for national agriculture development was also mentioned, put into practice by the Ministry of Agriculture in collaboration with the World Bank, and critical policies such as National Reforestation and ecosystem protection programmes. There are commissions and departments in the Ethiopian Government to tackle the effects of climate change and a Ministry in charge of the situation in the pastoral areas of the country. Moreover, regarding the Oromia regional level, also mentioned were: a variety of irrigation programmes on a small scale, especially focused on the development of projects led by women, as highlighted by regional government representative, man (Addis Ababa); subsidies to pastoral communities; and risk assessments. Some of them have support from the EU and some

In the Arsi zone, a local NGO also added programmes to support farmers with fertilisers, seeds and other issues to improve their lives

UN agencies, especially those focused on the IDP situation, also in terms of environmental problems. In the Arsi zone, a local NGO also added programmes to support farmers with fertilisers, seeds and other issues to improve their lives.

As mentioned previously, there is also a wide range of practices to change crops and tackle new diseases, and other effects, from the agricultural Arsi zone services. Regarding the effectiveness of these programmes, the key informants' opinions varied. On the one hand, an international donor mentioned the need to work on a mid to long-term strategy focused both on tackling the effects of climate change in Ethiopia and people's needs in terms of poverty and inequality to improve general development in connection with concrete NGO interventions. A local humanitarian NGO also expressed the need to join the endogenous NGO focused on growth and international NGOs focused

on strengthening the capacity-building of communities and made the criticism that the local government implemented Western policies without using local knowledge. But the main problem with all these policies is their partial implementation, recognised by the Government which asked for coordination with international and European agencies. At the district level, there was a division between those who could benefit from the programmes of some local and international NGOs and those who could not. For the former, programmes by WISE and Ayuda en Acción in Arsi Robe in supporting women's associations have a tangible impact on the ground, particularly when they improve the training capacities of their associates. In one case, a local savings and credit cooperative for women suggested working with individuals and trying to implement collective credits. In contrast, the FGDs in Amigna and Dodota expressed that they did not even know of the existence of programmes in their communities.

Summary of the main research findings

- 1** Climate change has been an additional push factor in deciding the future of the people of Arsi as it has exacerbated the vulnerability of communities in a very precarious situation, who are overly dependent on subsistence agriculture.
- 2** Climate change consequences are advancing even in the Arsi zone and Oromia region. There are more droughts, erratic rains and a significant lack of land productivity and livestock affection.
- 3** To adapt to these climate change effects, Arsi communities struggle with communitarian and familiar coping mechanisms such as seeking employment and selling assets and firewood.
- 4** There are also government coping mechanisms such as watershed projects,

small-scale irrigation and seeds of new agricultural varieties.

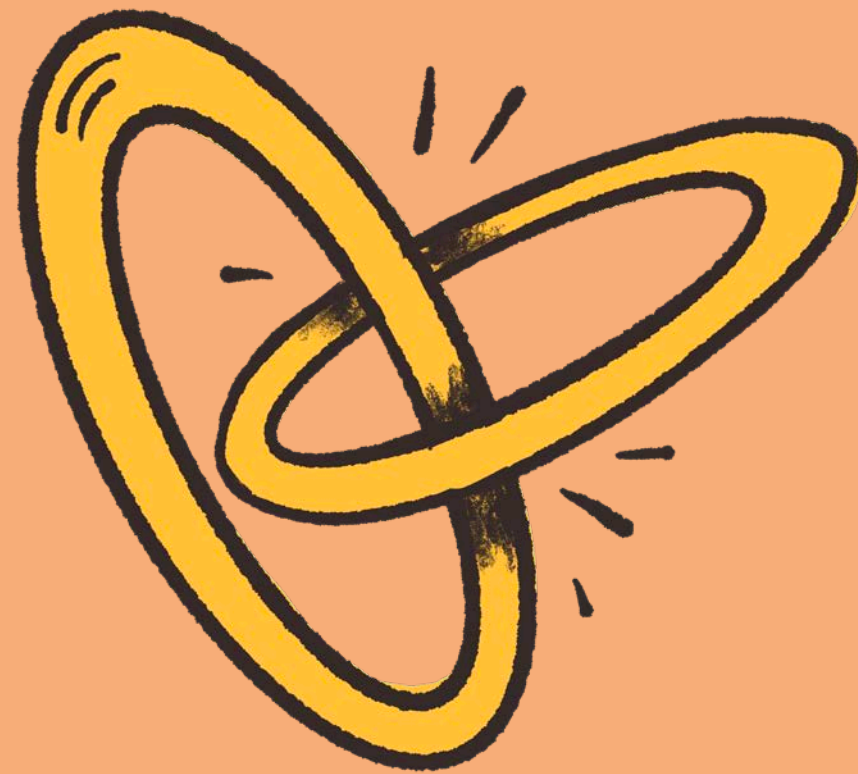
- 5** Internal and international migration constitutes a coping mechanism adopted to mitigate the adverse effects of climate change.
- 6** Migrating is a family project requiring significant resources, and it is a risky decision because of the journey for those who travel irregularly. Sometimes, family remittances succeed in reducing exposure to the effects of climate change as they improve families' quality of life.
- 8** Returnees' experiences often describe the enormous cost migrants pay in terms of economic, mental and physical health. In these cases, migration has made them more vulnerable, revealing it as a maladaptive strategy.

9 Although these conditions are not the same for everyone, age and gender have a differentiated impact. Young people suffer from the lack of income in subsistence agriculture, live in large families and have a low level of education, and they are more willing to migrate.

10 Despite the strong push for gender equality and the incorporation of women into the labour market expressed in the interviews, there is a gender gap in terms of their job options abroad and in the consequences of their return.



Conclusions



According to the quantitative and qualitative findings of this research, we can answer the main research question of this study by stating that the effects of climate change have been an additional push factor in deciding the future of the people of Arsi. As mentioned above, climate change is not a direct cause of migration in Arsi. Still, it has been shown how it exacerbates the vulnerability of communities in a very precarious situation, who are overly dependent on subsistence agriculture.



In this sense, based on the findings of the chapters on climate change effects, adaptation mechanisms and migration, we could highlight the main contribution of this research is that any policy aimed at improving the socio-economic conditions of Arsi's population must necessarily incorporate a cross-cutting dimension on development, climate change, gender and youth that, to be effective, should have a short- and medium-term approach.

In brief, the consequences of climate change are advancing even in the Arsi zone and Oromia region. However, the fact that these areas have fertile soils in the midlands and lowlands limits the impact, especially compared with desert areas (e.g., the Somali region) which have been suffering from the increase of severe drought during the last five years.

According to data collected in this research, the rainfall patterns show an increase in the average number of droughts in the Arsi zone

in the last decade. Our findings confirm the existence of more droughts, more erratic rains and a more significant lack of land productivity than reported five years ago. Rains have changed their summer patterns. The season has been reduced to two and a half months, and the mini rainy spring season has almost disappeared. Droughts and their opposite, floods, are more common in the lowlands of Arsi, areas which also registered higher temperatures. As a result, land productivity is declining in quantity and type of production, and livestock is suffering from more diseases and the absence of grass to feed them.

To adapt to these climate change effects, on the one hand, seeking employment, and selling assets and firewood were the three most used coping mechanisms cited in the survey. On the other hand, the key informants mentioned other government coping mechanisms that are working. They said watershed projects, the use of small-scale irrigation and seeds of new

agricultural varieties, such as fast-growing corn, and fertilisers. But they also mentioned they should follow local knowledge about agriculture. In other words, if the traditional survival agriculture and livestock of the more fragile layers of society in Arsi are “modernised” in means and local-knowledge base, the effects of climate change could be tackled, as is common in other parts of the world. In any case, the almost absolute income dependence on agriculture is another significant problem.

Internal and international migration constitutes a coping mechanism, it being a process adopted to mitigate the adverse effects of changes in rainfall patterns and increased drought in a context of intense vulnerability caused by economic and social factors deeply embedded in the region. However, it is not an entirely voluntary process for most Arsi people, given their deep connections to their families and communities. It is carried out because it is the best choice given their conditions and

understanding of their options. As this study has revealed, it is a choice that is only sometimes beneficial, especially when crossing the country's border.

Migrating is a family project that requires significant resources, which prevents them from being used to cover day-to-day needs or to develop other adaptation strategies. Travel conditions, the lack of protection encountered by irregular migrants, the lack of labour rights, the brutality of the authorities, and the situation of helplessness in the destination country, place migrants in a position of intense vulnerability, violating their most basic rights.

However, family remittances succeed only occasionally in reducing exposure to the effects of climate change, improving (or at least maintaining) the quality of life, or developing initiatives that strengthen the capacities and increase the resilience of beneficiaries. This is partly due to the limited supply of programmes and initiatives that

Young people suffer from the lack of income in subsistence agriculture caused by land scarcity, the absence of irrigation systems and the effects of climate change

support migrants and their families using these resources, providing them with the knowledge and skills to do so. The cases identified in the study where remittances and other resources provided by migrants have been used to start small businesses and other successful and sustainable entrepreneurial initiatives reveal the abilities and efforts of these families. However, they also highlight the absence of public policies and state programmes to support migrants and returnees.

Returnees' experiences often describe the enormous cost migrants pay in terms of economic, mental, and physical health. In these cases, migration has made them more vulnerable, revealing it as a maladaptive strategy. However, migration still has the potential to become a successful adaptation strategy. This only means that to develop such potential, migration cannot be solely a personal or family endeavour. Success depends on the migrant's ability to find a

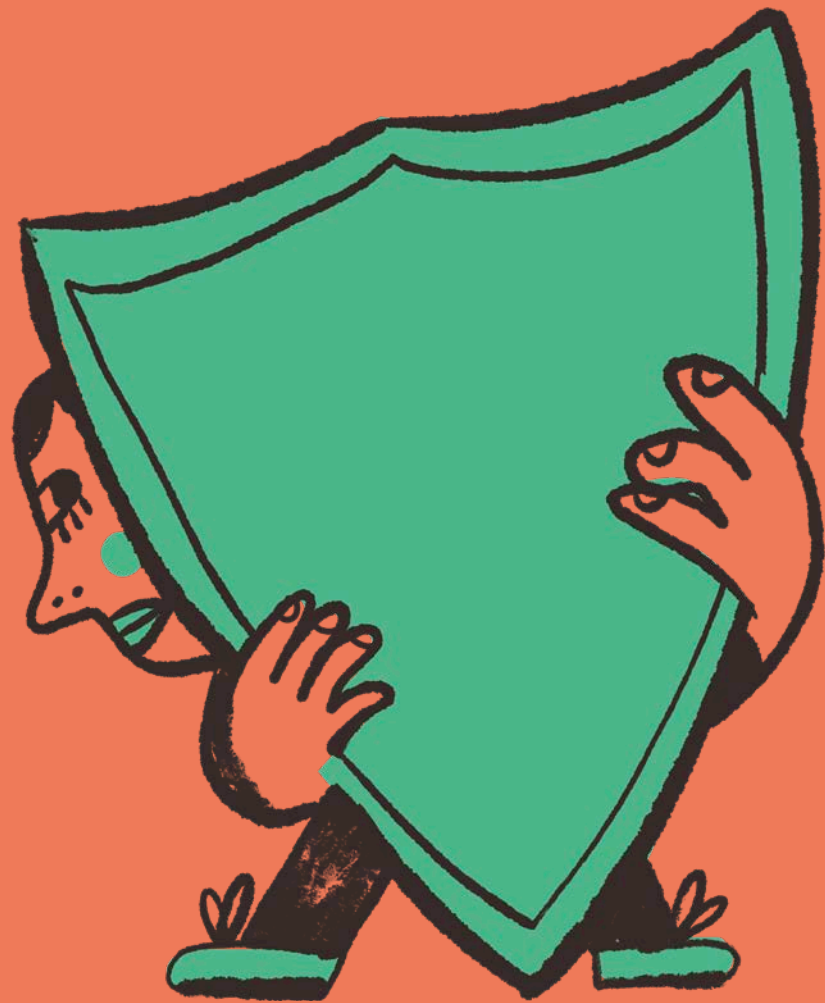
decent job and wisely invest the resources obtained during their journey. It can be a risky project, entailing dangerous journeys, human rights violations and abuse from both migratory authorities and employers. A public policy must be put in place, granting the migrants' rights, enhancing their agency and abilities, and helping them to invest remittances in adaptation processes. Equally important, those resources obtained by migrants can only be considered by authorities as a minor element of an ambitious climate change national adaptation plan devised following international guidelines.

Although these conditions are not the same for everyone, age and gender have a differentiated impact. Young people suffer from the lack of income in subsistence agriculture caused by land scarcity, the absence of irrigation systems and the effects of climate change. In addition, they live in large families and have a low level

of education, most commonly primary and secondary education. Although they do not have a high perception of a declining future, as their adult counterparts have, young people experience greater food insecurity, with fewer meals when deprivation occurs. The most important aspect is that young people are more willing to migrate than older people, who are more concerned with what they leave behind.

Despite the strong push for gender equality and the incorporation of women into the labour market expressed in the interviews, there is a gender gap. This is particularly evident in the domestic workers migrating to Arab countries as a family strategy, which also has different consequences, such as discriminatory wages and abuses, as several women in the FGDs described. They must deal with the consequences as returnee women and depend on their families, husbands and parents to invest their money.

Recommendations



Based on the analysis and conclusions above and considering the ideas expressed by the population surveyed, the following recommendations are made for humanitarian agencies, development NGOs, local administrations, and international donors, who should:

- Implement sustainable, adequately resourced and multidimensional development policies and programmes that address the cross-cutting dimensions of climate change, gender and youth, which, to be effective, must have a short- and medium-term approach and sustainable and multidimensional programmes (climate, gender, age, inequality, poverty, etc.).

In the short term, they should

Climate change effects

- Include in every programme the need to adapt to climate change and its impact on population vulnerability (rainfall, drought and land productivity).
- Cover the most pressing humanitarian needs of communities affected by extreme climate events (droughts, floods etc.).

Coping mechanisms

- Invest in facilities that increase the resilience of communities to tackle climate disruption through improvements in agricultural modernisation.
- Include socio-economic and climate policies adapted using local knowledge.

Migration as another coping mechanism

- Develop programmes to support people likely to migrate so they have the knowledge and skills to determine whether migration is the best option for them.
- Develop programmes to educate migrants and their families on the effective use of remittances.

The specific needs of returnee migrants

- Develop more programmes for the reintegration of returnees, including economic, social, and psychological aspects.

Different policies by age and gender

- Increase employment opportunities for youth in agriculture and other areas, building on the successful examples of cooperatives.
- Increase the socio-economic empowerment of women in the context of climate change. These programmes should consider women's unique role in internal and external migrations.





In the mid- and short-term, all stakeholders should

Climate change effects

- Coordinate NGOs’ people-centred initiatives with international agencies and local government’s efforts focused on climate change adaptation strategies and economic development,
- Continue to demand climate justice in international forums and the effective implementation of the recently announced specific fund to finance loss and damage caused by climate change.

Coping mechanisms

- Create irrigation systems and train the population in adaptive agricultural production.

- Investigate crop adaptation types for a long-term strategy considering soil fertility.
- Conduct operational research focused on the consequences of each climate change effect on rainfall, drought and land but also clean water, disease and pollution.
- Coordinate their efforts with clear and sustainable criteria for the population. This should be done via well-funded programmes.

Migration as another coping mechanism

- Inform about legal and safe ways of accessing international migration.
- Develop programmes to facilitate circular and seasonal migration within

Increase efforts in the fight against human trafficking, emphasising prevention and developing programmes to assist victims

- the country, emphasising security and protection of migrants' rights.
- Increase efforts in the fight against human trafficking, emphasising prevention and developing programmes to assist victims.
- Reach agreements with the destination countries of migratory flows to developing temporary, circular migration programmes that guarantee the safety and rights of migrants.

Different policies by age and gender

- Increase youth-oriented services, especially regarding training, education and working possibilities.
- Recognise and promote the role of women in community development as well as their role in migration.



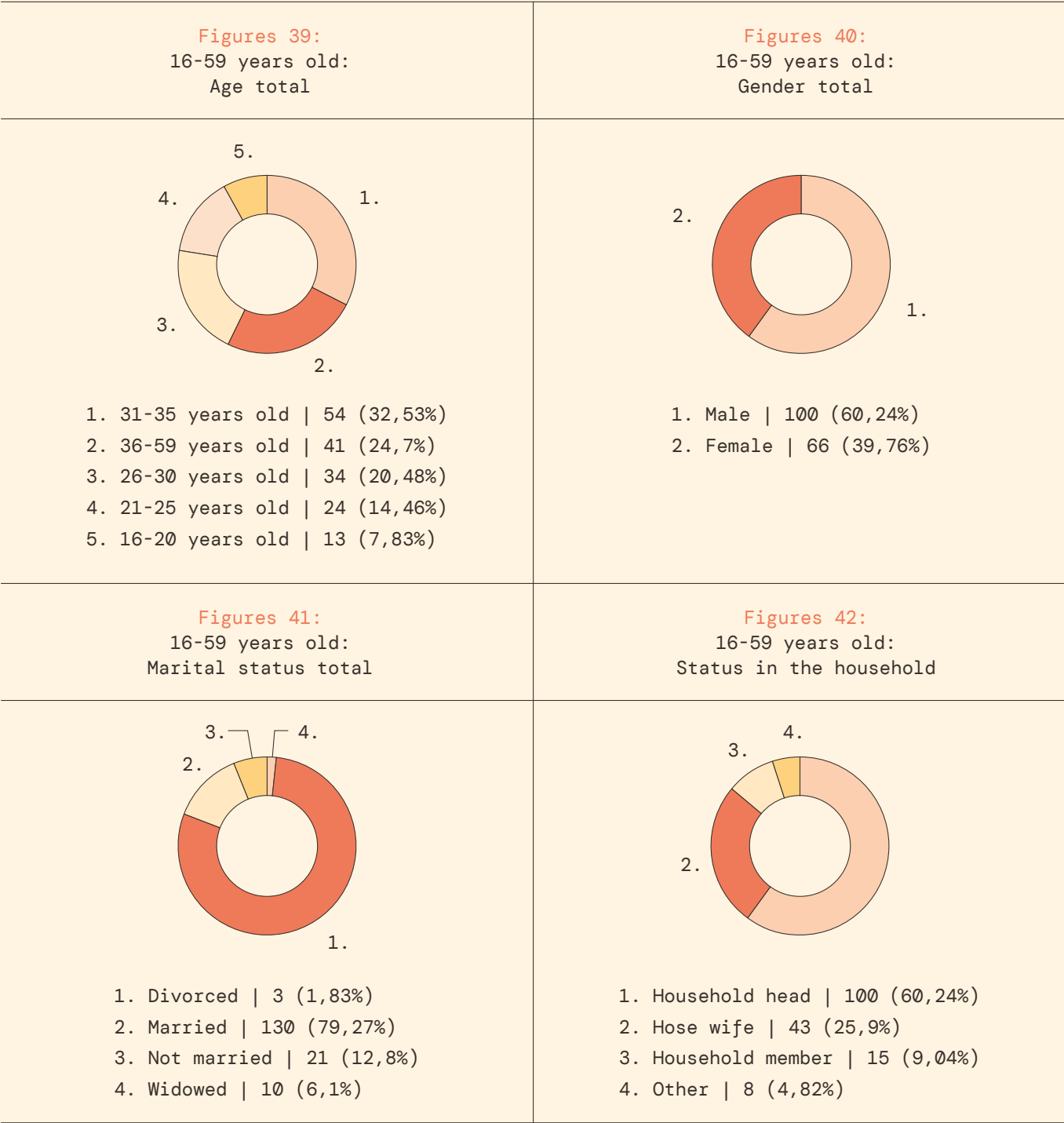


Figure 43: 16-59 years old: Total family size including yourself

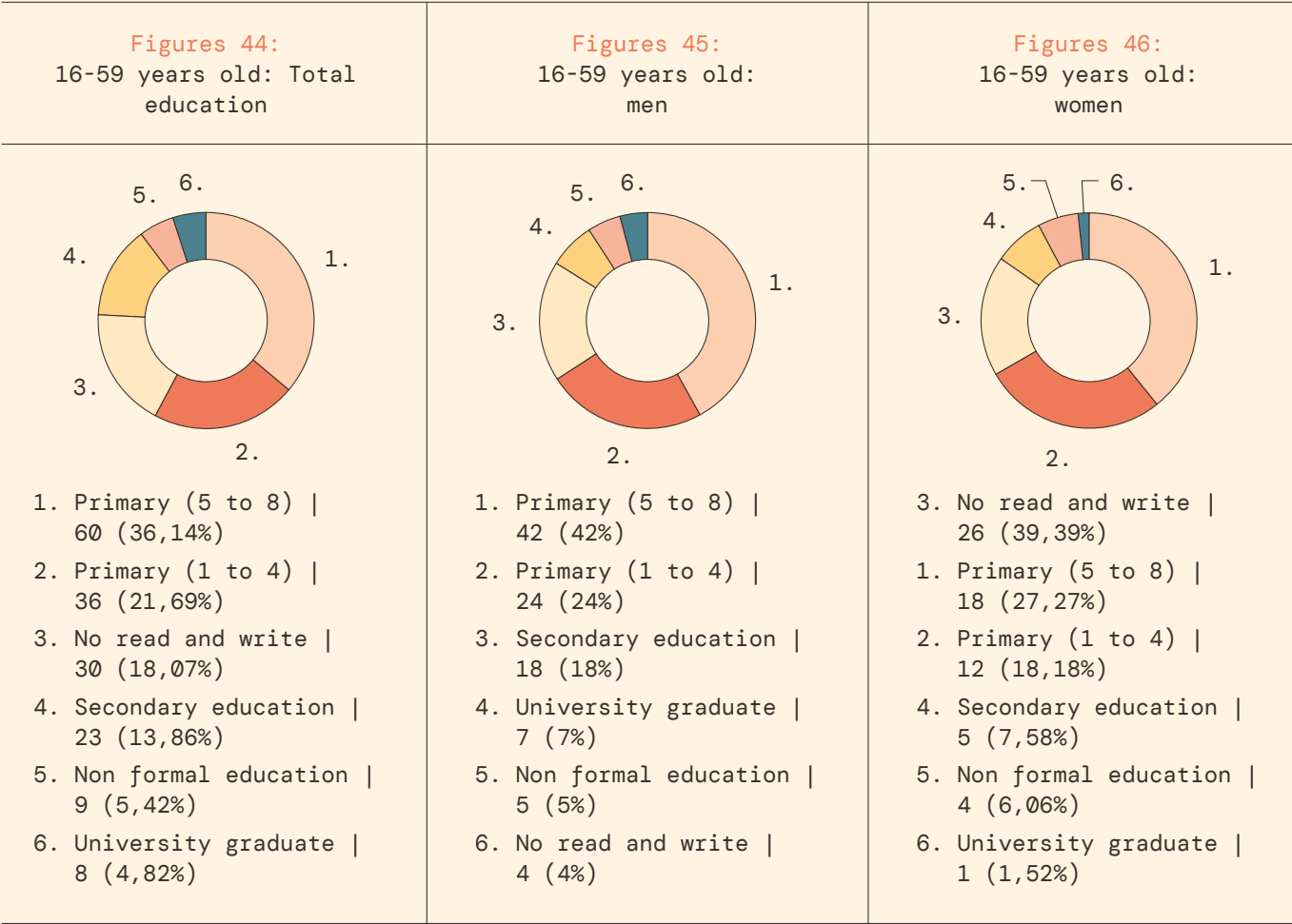
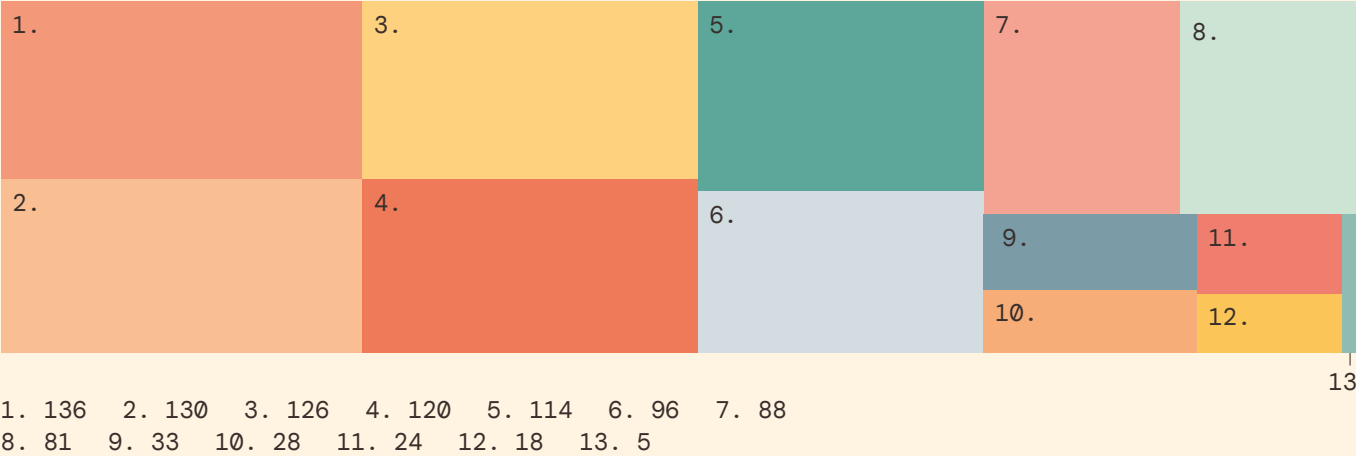
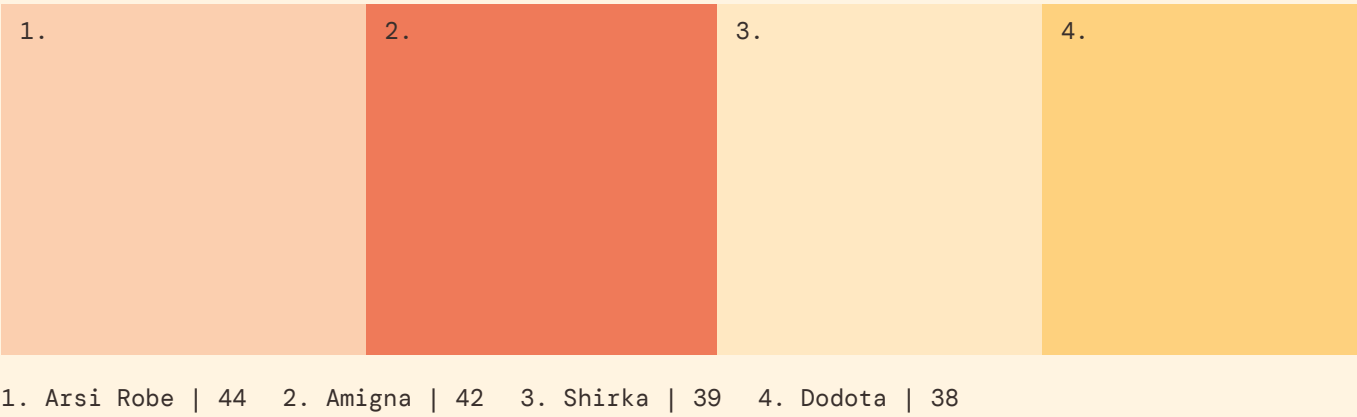


Figure 47: 16-59 years old: District



Annexed Bibliography Research Methodology and Tools

- Abebe, Tatek (2020) Lost futures? Educated youth precarity and protests in the Oromia region, Ethiopia, Children's Geographies.
- Black, Richard, Bennett, Stephen, Thomas, Sandy, and Beddington, John (2011), "Migration as adaptation", Nature, 478.
- Belcore, Elena; Calvo, Angela; Canessa, Carolin; and Pezzoli, Alessandro (2017), "A Methodology for the Vulnerability Analysis of the Climate Change in the Oromia Region, Ethiopia."
- Belay, Abraham; Recha, John W.; Woldeamanuel, Teshale; and Morton, John F. (2017). "Smallholder farmers adaptation to climate change and determinants of their adaptation decisions in the Central Rift Valley of Ethiopia".
- Bedada, Tadese; Sultan, Mustefa; and Amano Teyiba. Oromia Urban Planning Institute, Addis Ababa, Ethiopia. Department of Natural Resource Management, College of Agriculture and Environmental Science, Arsi. University, Assela, Ethiopia. Department of Ecotourism and Cultural Heritage Management, Wondo Genet College of Forestry and Natural Resources, Hawassa University, Ethiopia (2018) "Farmers' Perception and Adaptation Strategies to Climate Change and Variability in Arsi Negele District, Oromia, Ethiopia."
- Brown, Oli (2008), Oli, Migration and Climate Change, Geneva: IOM Migration Research Series.
- Jafer, Endris; Gutema, Imana; Doda, Zerihun; and Lemesa, Abebe (2022). "Post-conflict-induced displacement: Human security challenges of internally displaced persons in Oromia, special zone surrounding Finfinne, Ethiopia"
- CEAR y Greenpeace. (2021) 'Huir del clima. Cómo influye la crisis climática en las migraciones humanas'.
- Centro de studi di Política Internazionale/Agencia Italia per la Cooperazione (2021). "Il ruolo della diaspora in relazione ai cambiamenti ambientali in Africa".
- Danish Institute for International Studies (2020). "No place for me here: The challenges of Ethiopian male return migrants".
- Danish Institute for International Studies. (En curso). Proyecto de investigación sobre el rol de la gobernanza influye en la migración en entornos afectados por el Cambio Climático.
- Danish Institute for International Studies (2022), "Adapting to a changing climate in Ethiopia".
- Desta Tegegne, Atsedo and Penker, Marianne (2016). "Determinants of rural out-migration in Ethiopia: Who stays and who goes. Demographic research. A peer-reviewed, open-access journal of population sciences".
- Dugassa , Begna; Diba, Fantahun; Bachie, Olie. American Journal of Public Health Research (2021) "Climate Change and Public Health in the Oromia Regional State in Ethiopia and Its Implications for the Nile Basin".
- Ethiopian Journal of the Social Sciences and Humanities (2017). "Illicit Cross-border Migration in Ethiopia: Causes, Patterns and Policy Responses. Ethiopian Journal of the Social Sciences and Humanities".
- Färber, Lisa; Nagabhatla, Nidi; Ruyssen, Ilse. (2022). "Assessment of Water-Migration-Gender interconnections in Ethiopia, Frontiers in human dynamics".
- Felli, Romain (2013) "Managing Climate Insecurity by Ensuring Continuous Capital Accumulation: "Climate Refugees" and "Climate Migrants," New Political Economy, Vol. 18, Issue 3.
- Global Residence Index (2019) World most and least polluted cities.
- Federal Democratic Republic of Ethiopia Poverty and Economic Growth in Ethiopia (2018) (1995/96-2015/16)
- Federal Democratic Republic of Ethiopia Population Census Committee (2007), Summary and Statistical Report Population and Housing Census.
- FAO (2021) "Regional Overview of Food Security and Nutrition. Africa Statistics and trends."
- Forum for Social Studies (2020). "Women land rights and land utilisation in Ethiopia"
- Forum for Social Studies (2021). "Landlessness and youth in Ethiopia. Forum for Social Studies.
- Forum for Social Studies (2020). "Land and Food Security Concerns in Oromia National Regional State".
- Game, Hugo (2009), Migration, development and environment, Geneva: International Organization for Migration (IOM).
- Hameida, Ebbaba. (2022). "África La sequía agudiza la pobreza menstrual en África: "Todos los meses tengo la regla, pero no siempre tengo agua".



- Kniveton, Dominic, Smith, Christopher, Black, Richard, and Schmidt-Verkek, Kerstin (2009), "Challenges and approaches to measuring the migration-environment nexus", Migration, Environment and Climate Change: Assessing the evidence, Aghazarm, Christine and Laczko, Frank (Eds), Geneva: OIM, 2009, p. 30.
- IDMC (2022). "Drought displacement modelling"
- IDMC (2020). "Impacts of displacement - Drought displacement in Gode Woreda, Ethiopia".
- IECAH (2019). "La migración en el contexto de cambio climático y desastres: reflexiones para la cooperación española".
- ILO (2018). "Situations and Needs Assessment of Ethiopian returnees from the Kingdom of Saudi Arabia".
- IMAPAP (2022). "Analysis of internally displaced people in drought affected regions of Ethiopia".
- International Conference on African Development Archives (2018). "Factors Affecting TVET Responsiveness to Youth Employability: Reflection on Practices of Competency-Based Provisions in Arsi Zone of Oromia Regional State".
- International Crisis Group (2021). "Ethiopia's Civil War: Cutting a Deal to Stop the Bloodshed".
- International Crisis Group (2022). "Ethiopia Crisiswatch Digest".
- International Migration Institute (2020), "Migration, Development and the Urbanization of the Good Life: Mobility Transitions in Rural Ethiopia".
- IOM (2021) "Over 800,000 Ethiopians migrated abroad in the past five years - Labour Migration Survey Finds."
- IOM (2021). "A region on the move: Mid-year mobility overview".
- IOM (2021). "Migrating in search of the southern dream. The experiences of Ethiopian migrants moving along the southern route".
- IOM (2021) "Ethiopia: Flow Monitoring Survey Report".
- IOM (2022). "Migration along the Eastern Corridor".
- IOM (2021). "Ethiopia National Displacement Report"
- IOM (2021). "They Snatched from Me My Cry. The interplay of social norms and stigma about human trafficking in Ethiopia. Case Study: Jimma and Arsi Zones".
- IOM (2022) "Ethiopia National Displacement Report 11 - Site Assessment Round 28 & Village Assessment Survey".
- IOM (2022) "World migration report."
- IPCC (2007) Intergovernmental Panel on Climate Change, Climate Change 2007 - The Physical Science Basis: Working Group I Contribution to the Fourth Assessment Report of the IPCC, Cambridge & New York, Cambridge University Press.
- IPCC (2014), "Anexo ii: Glosario", Cambio climático 2014: Informe de síntesis. Contribución de los Grupos de trabajo i, ii y iii al Quinto Informe de Evaluación del Grupo Intergubernamental de Expertos sobre el Cambio Climático, Geneva, p127.
- IPCC (2022). "Climate Change 2022: Impacts, Adaptation and Vulnerability Working Group II Contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change"
- Kuschminder, Katie (2016). "Strong ties, weak ties: Exploring the role of networks in domestic worker migration from Ethiopia to the Middle East".
- Leighton, Michelle (2009). "Migration and slow-onset disasters: desertification and drought", Migration, Environment and Climate Change: Assessing the Evidence, Aghazarm, Christine and Laczko, Frank (Eds.) Geneva: OIM, p327.
- Lund University, Masters Program in Environmental Studies and Sustainability Science (LUMES) (2009)). "Climate change impact on livelihood, vulnerability and coping mechanisms: A case study of West-Arsi zone, Ethiopia".
- Maastricht University (2017). Ethiopia "Migration Profile. Study on Migration Routes in the East and Horn of Africa".
- MAYER, Benoît (2016), The concept of climate migration. Advocacy and its Prospects, Cheltenham, UK, and Northampton, MA, USA: Edward Elgar Publishing. p8
- McAdam, Jane (2012) Climate Change, Forced Migration and International Law, Oxford: Oxford University Press, p16
- Martin, Susan (2009) "Managing environmentally induced migration", Migration, Environment and Climate Change: Assessing the evidence, Aghazarm, Christine & Laczko, Frank (Eds) Geneva: OIM, p. 365. HUGO, Graeme, IOM. Migration



Research Series. Migration, development and environment, Nº 35, Geneva: OIM, 2009.

Metema (2020). "Migration and migration management on the Ethiopia-Sudan border. Research and evidence facility."

Mekonne, Zenabe; Habtemariam, Kassa; and Woldeamanuel T. (2018) "Analysis of observed and perceived climate change and variability in Arsi Negele District, Ethiopia".

Musah-Surugu, Issah, AHENKAN, Albert and BAWOLE, Justice "Migrants' remittances. A complementary source of financing adaptation to climate change at the local level in Ghana" International Journal of Climate Change Strategies and Management Vol. 10 No. 1, Vol. 10, No. 1, p. 1. Management Vol. 10 No. 1, 2018, NAIK, Op.Cit.

Naik, Asmita. (2009), "Migration and Natural Disasters", Migration, Environment and Climate Change: Assessing the Evidence, Aghazarm, Christine. and Laczko, Frank (Eds) Geneva: OIM p274-275.

Nansen Initiative (2015), Guiding Principles on Internal Displacement and the Nansen Initiative Protection Agenda (2015)

Oromia National Regional State Program of Plan on Adaptation to Climate Change (2011).

Pakistan Journal of Psychological Research, Kassim KimoandGezahegn Gurmu, Arsi University (2022). "Coping strategies of female return migrants settled in East and West Arsi zones of Ethiopia".

Relief Web (2022). "Ethiopia: From conflict to climate shocks, women and girls are disproportionately affected".

Sánchez, Beatriz and Rubiano, Sebastián (2018)- Territorios en transformación, derechos en movimiento. Cambio climático y movilidad humana en Colombia. Bogotá: Ediciones Uniandes, p8.

Shirbon, Estelle. Reuters Analysis: Truce in Ethiopia's Tigray war just the first step on the long road to peace. 03/11/2022.

Teso, E. & Alamirew, T. & Olumana, M., (2014. "Predicting runoff yield using SWAT model and evaluation of Boru Dodota Spate Irrigation Scheme, Arsi Zone, southeastern Ethiopia," IWMI Books, Reports. International Water Management Institute."

The Lancet (2022). "COP27 Climate Change Conference: urgent action needed for Africa and the world".

The bulletin of atomic scientists (2022) "New roots of famine: How climate crises and global conflict combine to threaten millions in the Horn of Africa.

"The New Humanitarian" (2017). "Ethnic violence displaces hundreds of thousands of Ethiopians".

The Economist (2022). "Ethiopia. Falling apart".

The relief web (2022). "HPG briefing note - Climate change, conflict and displacement: five key misconceptions"

Tulu, Fikadu Doti; Biyena Debeli Chala and Edesa Dese Yadeta (2021) "The Determinants of Vulnerability to Poverty Among Female-Headed Households in Rural Ethiopia: The Case of West Arsi Zone, Shashemene District."

UNICEF (2021). "A Review of Child Sensitivity in Social Policies in Ethiopia"

UNICEF (2022). "Oromia regional brief".

UNOCHA ETHIOPIA (2022). Cluster Status: Food Last updated: 6 Dec 2022

UNOCHA (2021) Predicting drought-related food insecurity in Ethiopia

United Nations General Assembly (2016) Global Compact for Migration

Universidad de Roma. DSD - Department of Demographic Sciences, La Sapienza, Roma. CSA - Central Statistical Authority, Addis Ababa (2001). "Internal Migration in Ethiopia. January 2001".

Universiteit Leiden (2020) "Women trafficking in Ethiopia and its mitigation; The case of Arsi Zone, Oromiya".

Vinke, Kira, Bergamann, Jonas, Blocher, Julian et al. (2020) 'Migration as Adaptation', Migration Studies 8(4)

World Bank (2018). Internal Migration in Ethiopia Evidence from a Quantitative and Qualitative Research Study.

World Bank (2022) "Poverty & Equity Brief Ethiopia. Africa Eastern & Southern"

World Development, Norwegian University of Life Sciences (2014). "Are Rural Youth in Ethiopia Abandoning Agriculture?"

