

Article

Making the “Unthinkable” Thinkable: Fostering Sustainable Development for Youth in Ethiopia’s Lowlands

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Abstract: Ethiopia’s economic, social, and environmental risks are not distributed equally. Its lowland areas lag behind its upland plateau on myriad development indicators, and they are at much greater risk of climate change impacts. Attending to this imbalance is critical if Ethiopia is to deliver on the Sustainable Development Goals (SDGs) and takes on heightened import given the size of its youth population. This paper draws on qualitative, longitudinal data collected between 2017 and 2022 to explore the diverse and interwoven risks facing adolescents (and their families) living in the lowland areas of the Oromia and Afar regions. While risks—including drought, invasive species, population growth, and restrictive gender norms—are similar across research locations, differences in traditional livelihoods and government investments mean that outcomes are highly varied. In agriculturalist Oromia, improved access to transportation infrastructure in particular has resulted in such improved livelihoods that it is not uncommon for households to prioritise earning over learning. This is especially true for girls. In pastoralist Afar, where many communities have extremely limited access to potable water and education, current and future lives and livelihoods remain truncated. The paper concludes that sustainable development requires that the government of Ethiopia and its partners invest in a twin-track approach that supports households to meet current needs and to invest in the education that positions young people to thrive in the future.

Keywords: Ethiopia; adolescents; capabilities; environmental risks; livelihoods; education



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1. Introduction

Ethiopia’s present situation highlights both its potential and its peril. On the one hand, its development progress over the past two decades has been remarkable. Since 2000, the poverty rate has approximately halved, the primary education completion rate has more than doubled, and the proportion of girls who marry by the age of 15 has plummeted [1–4]. On the other hand, Ethiopia remains one of the world’s poorest countries, it has experienced escalating conflict over the past three years, and is one of the top ten countries most vulnerable to climate change [5–8]. Due both to its geography and ethnic diversity, economic, social, and environmental risks are not distributed equally. Ethiopia’s lowland areas lag behind its upland plateau on myriad development indicators, and they are at much greater risk of climate change impacts [2,4,8,9]. Attending to this imbalance is critical if Ethiopia is to deliver on the Sustainable Development Goals (SDGs) that the government has mainstreamed into national and sub-national plans, including its most recent Growth and Transformation Plan (GTP II) [10–12]. Indeed, given current performance on SDG 4 (education)—especially as it relates to SDG 5 (gender equality)—and on SDGs 8 (decent work) and 10 (reduced inequalities), Ethiopia’s 2030 Agenda appears off-track and poised to become more so given the large population of young people coming of age in a time of increased environmental stress [12,13].

Drawing on the human development approach and its emphasis on how education and work are important not only for economic development but also for people to flourish, this descriptive article uses qualitative, longitudinal data collected between 2017 and 2022 to explore the diverse and interwoven economic, social, and environmental risks facing adolescents (and their families) living in the lowland areas of the Oromia and Afar regions. We begin by presenting our framing, a brief literature review, and our methods. Our results are organised to highlight similarities and differences in lowland livelihoods, stressors, progress, and gaps. We conclude by setting out the implications for policy and programming, recognising that sustainable development requires a twin-track approach that supports households to simultaneously meet today's consumption needs while also being able to invest in the education that positions young people to thrive in the future.

2. Materials and Methods

2.1. Framing

The World Youth Report 2018 observes that young people in developing countries often experience fraught transitions between school and work [14]. On the one hand, high real and opportunity costs regularly prevent adolescents from receiving the secondary schooling that would help them develop the competencies they need to access decent work. On the other hand, improved access to education has not necessarily been matched by expanded access to 'educated livelihoods', leaving a growing number of young people (and their families) to question the value of education given local job markets. Both of these issues have long-term implications for individual lives—and development progress. More importantly, both have implications that transcend the simple, economic framing of school-to-work transitions because of the way in which they impact not only what young people do, but who young people and their communities perceive young people to be.

The capabilities approach, first championed by Amartya Sen, underscores the importance of looking beyond 'development as dollars' to include people's individual freedoms to do and be the things they value [15,16]. It was later nuanced by Kabeer (2003) and Nussbaum (2011) to better account for gender differences and to include empowering broader communities to develop their collective capabilities [17,18]. Now often called the human development approach and deeply embedded in the 2030 Agenda and its focus on improving opportunities for all, the capabilities approach emphasises that development must work towards not only human survival but human flourishing.

Ethiopia's lowlands offer an important lens through which to explore the multi-faceted nature of sustainable development and the importance of taking a broad capabilities approach to that development. They lag behind the country's upland regions on diverse indicators, including educational access and gender equality, and people's livelihoods are especially vulnerable to climate change, jeopardising young people's transitions to adulthood. In addition, although the lowlands of Oromia and Afar have much in common, their economic, social, and environmental differences highlight the importance of tailoring development interventions. This article, therefore, aims to (1) describe the diverse and interwoven economic, social, and environmental risks facing adolescents and how those risks are limiting young people's broader capabilities and (2) identify priority openings for policy and programming to begin addressing those risks and support young people to flourish.

2.2. Context

2.2.1. Economy and Poverty

Ethiopia's economy is driven by smallholder farming. In 2018, it provided livelihoods for most (85%) of the population, contributed three-quarters of export commodity value, and was responsible for just over a third (34%) of gross domestic product (GDP) [8]. Ethiopia's smallholders produce both crops and livestock. Though most are constrained by the small size of their landholdings, cash cropping has become more common in some areas in recent years, including in parts of the Oromia region [9]. Alongside producing

legumes and cereals, farmers in Oromia are growing khat (a shrub, the leaves of which can be chewed for a mild stimulant effect). Khat is highly lucrative for farmers and is now Ethiopia's second largest export (after coffee), despite it being illegal in many countries and despite emerging evidence that it negatively impacts the household economies of local users [19–21]. Pastoralism is also a major source of livelihoods, with Ethiopia's pastoralists tending the largest livestock population in Africa [22].

Driven by government policies aimed at transforming the economy, Ethiopia's economic growth has been strong over the past decade, averaging nearly 10% a year [2]. This has led to significant declines in the poverty rate, which was estimated at 23.3% in 2021 [12]. Economic growth—and poverty reduction—has been strongest in urban areas. In 2016, the urban poverty rate was 11 percentage points lower than the rural rate (15% versus 26%) [2]; see also [23]. People in drought-prone lowland areas, which include parts of Oromia and Afar, are even more likely to be poor, with the poverty rate in those areas calculated at 32% [2]. The World Bank (2020a) adds that rural Oromia has seen no reduction in poverty and continues to lag behind the rest of the country on an array of development indicators—in large part because government expenditure per capita is lower than in other regions of the country. In contrast to common assumptions, rates of monetary poverty in pastoral areas (which include the bulk of the Afar region) are relatively lower (22%) [2]. However, not only are pastoral areas highly deprived when it comes to non-monetary dimensions of poverty—such as access to the infrastructure and services that support human capital development and longer-term poverty reduction—but the World Bank (2020b) estimates that Afar's poverty rate has been especially cushioned by Ethiopia's flagship social protection programme (the Productive Safety Net Programme (PSNP)). In the absence of that programme, Afar's poverty rate may have been as high as 34% [9].

2.2.2. Environmental Threats

Ethiopia is extremely vulnerable to the impacts of climate change, partly due to its geography-driven climate and partly due to its reliance on smallholder, rainfed agriculture [8]. Only 1% of the country's surface area is irrigated [8]. Average temperatures have climbed nearly 1 °Celsius since 1960, with the lowlands warming the most (1.5 °C) [8,22]. A further 1 °C increase is predicted in the next two decades [8]. Ethiopia's rainfall patterns have long been stochastic, but evidence suggests that, since 1960, they have become even less predictable [8]; see also [24]. In many areas of the country, including parts of the Afar and Oromia regions, drought is becoming more common, more widespread, and more protracted, and flooding has increased [8,25].

Changing climate conditions in Ethiopia's lowland regions have contributed to and are being exacerbated by a takeover of invasive species. In terms of plants, two species are of particular concern. *P. juliflora*—which was introduced in the 1970s as part of an effort to reverse desertification—is covered in inches-long thorns, forms nearly impenetrable thickets that crowd out native species, has roots that can reach up to 60 metres, and has taken over more than 1 million hectares of land in Afar alone [26,27]. *P. hysterophorus*, which was first spotted in Oromia in the late 1980s and is believed to have been accidentally introduced via grain delivered as food aid, not only crowds out native species and crops but is a serious human allergen [28,29]. The recent swarms of locusts that are plaguing East African countries (including Ethiopia) have also been linked to climate change [30,31]. Tropical cyclones which normally weaken before making landfall have, instead, brought heavy rainfall that has led to outbreaks of billions of locusts that, in the first quarter of 2020, destroyed nearly 200,000 hectares of crops in Ethiopia [30,31].

2.2.3. Youth Situation

The situation for Ethiopia's children and youth is mixed. Their access to education has improved remarkably, at least at the national level. UNESCO (2022) reports that, in 2020, the primary completion rate reached 57% (up from less than 18% in 2000), and the lower-secondary completion rate reached 28% (up from 7% in 2000) [3]. In Oromia and

Afar, however, access remains more limited. The Ministry of Education (2020) reports that net enrolment in grades 5–8 was only 60% in Oromia and 20% in Afar. Gender complicates the picture further [32]. Although national figures show that girls are slightly advantaged over boys [3], in Oromia and Afar, only three girls are enrolled in secondary school for every four boys enrolled [32].

In addition, and in large part due to continued fast population growth, young people's access to employment is increasingly challenged. The CSA (2020) reports that, among Ethiopians aged 15–29, urban unemployment rates are 32% for females and 19% for males [33]. In rural areas, where official unemployment rates are very low due to young people's involvement in household agriculture, Dom and Vaughan (2018) concluded that actual unemployment and underemployment rates are quite high given that those who cannot support themselves are considered unemployed and that 68% of rural workers are economically active for less than half the year [34].

2.3. Methods

This study is part of the much larger Gender and Adolescence: Global Evidence (GAGE) mixed-methods, longitudinal research programme, which is exploring what works to support the development of adolescents' capabilities [35]. It draws on qualitative research undertaken between 2017 and 2022 and includes data from GAGE's baseline (late 2017–early 2018) and midline (late 2019–early 2020), as well as ongoing participatory research. The data used for this article were collected in two of Ethiopia's rural regions: the lowlands of Oromia and Afar (the broader programme is also working in the highlands of Amhara and in three urban areas). Specific research locations were chosen for their combination of economic and social vulnerabilities. In Oromia, data were collected in five communities (kebeles) in the East Hararghe district (woreda). In Afar, data were collected in five communities in Zone 5.

Our qualitative sample was purposively selected from the much larger quantitative sample (7526 adolescents) and, in Oromia and Afar, included nearly 350 adolescents, as well as caregivers (201) and key informants (103) (see Table 1) [36]. Care was taken to ensure that the most disadvantaged adolescents, such as out-of-school adolescents, married adolescents, and adolescents with disabilities, were included. Interviews, which used a variety of engaging and participatory tools, including community and body mapping and photography, were conducted by researchers who spoke the local language and had received training in how to communicate with adolescents about sensitive topics. Data were thematically coded using a codebook developed around GAGE's capability-based, conceptual framework and then analysed using the software package MAXQDA.

Table 1. Qualitative sample.

	Oromia	Afar
Adolescents	228	112
Parents	133	68
Key informants	71	32

Prior to commencing research, we secured approval from ethics committees at the Overseas Development Institute and George Washington University, as well as from the research ethics boards in the two regional Bureaus of Health of Ethiopia. We also secured informed assent from adolescents aged 17 and under and informed consent from their caregivers (as minors under 18 are not legally able to give consent) and from adolescents aged 18 or above.

3. Results

3.1. Livelihoods and Stressors

In line with existent research, our survey found that nearly all households in Zone 5 (84%) and East Hararghe (94%) derive their livelihoods from agriculture [37]. However, the nature of those agricultural livelihoods is markedly different across locations. Zone 5 is a pastoralist area, and households depend on livestock (camels, cattle, and shoats) for both food and income. Seasonal migration is the norm, as households move their herds—which are relatively large (11.7 tropical livestock units—which are used by the Food and Agriculture Organization to measure biomass)—to take advantage of rainfall and grass. In East Hararghe, although households keep animals for meat and milk (1.6 tropical livestock units), livelihoods are based on crops. Most households produce for their own use, selling any surplus. Groundnuts are a particularly common crop in the area, though, in the past five years, there has been an explosion of khat farming. In both areas, households also produce firewood and charcoal for sale, primarily in the dry season.

Unsurprisingly, given that both areas are in Ethiopia's lowlands, livelihoods in Zone 5 and East Hararghe are facing many of the same environmental threats. Chief among these is drought driven by climate change. Respondents noted that droughts are becoming more frequent and more severe. An older man from Community B (Zone 5) explained that rainfall patterns have radically shifted: *'Drought existed in the past. But the current one is different... The current one is severe and wide... There were three rainy seasons in the past. These are Dada'aa, Sugum and Karma. Of these three rainy seasons, we now do not get rain in Sugum and Karma seasons. Now we only get for Dada'aa season'*. Narratives are similar in East Hararghe. The grandmother of an adolescent boy from Community H noted that *'Everything is changed now. There is no rain in this time. The drought that we haven't seen in the past time is happening now... It is around 5–6 years since we had proper rainfall... Crops are dried fields because of the lack of rainfall'*.

Livelihoods in East Hararghe and Zone 5 are also stressed by invasive species. In East Hararghe, community key informants in Community H reported that previously fertile ground has been taken over by *P. hysterophorus*, *'a kind of a weed that overwhelms our crop when it starts growing... the pesticides we use cannot kill this weed'*. In locations where *P. hysterophorus* is most established, it has reduced yields so significantly that even those who own farmland have been forced to migrate. A father currently living in Community I, displaced by violence in Somali region—where he had moved to find waged labour—explained his choice: *'We had farmland. But we did not have anything to work... The weed destroyed our produce'*. In Zone 5, livelihoods are being decimated by the spread of *P. juliflora* and an invasion of locusts. A kebele official in Community M reported of the former, *'This plant can grow very fast in the rainy season and cover all the areas. Then it prevents other grasses to grow. In the past five years, it destroyed all the grasses that we used for animal food'*. A woreda-level official added, *'It become beyond the capacity of the woreda to protect the invasion of this plant into rangelands... Even though the woreda has been trying to eliminate it by mobilizing the PSNP beneficiaries to cut it as part of the public works scheme, the plant rather regenerated itself and expanded over wider spaces... People have been migrating to other areas when their grazing lands are invaded'*. Recurrent swarms of locusts have so devastated Zone 5's landscape that adolescents, when asked about the impacts of the COVID-19 pandemic on their lives, ignored the question and spoke only of locusts. An 18-year-old girl in Community A explained, *'The locust destroyed everything green in our locality. It ate the grass and green leaf of trees in our locality within two days. It caused for grass shortage for animals'*. A 17-year-old boy in the same community added, *'People are migrating to other localities looking for grass for animals'*.

Environmental threats are amplified by growing population pressure. In both East Hararghe and Zone 5, family size tends to be large, as polygamy is not uncommon, children are seen as a gift from God, and contraception is widely considered 'haram' (forbidden). Most of the adolescents in the GAGE sample have five or six siblings, and it is not uncommon for families to have more than ten children. The impact of this on local environments

and sustainable development cannot be overstated. A key informant (nearing 60 years of age) from Community I (East Hararghe) noted that farming has become far more difficult in recent decades as the population has grown: *'In 1969, all these hills and mountains were covered with forest... All the cattle spent the whole day in that forest without reaching to any farmland. Recently, as a result of increasing population size, there is high competition for farmland and other resources'*. Narratives are similar in Zone 5. A kebele official from Community N reported, *'When I was a child 40 years ago, it was a densely forested land with diverse species of trees and the home of many wildlife including lions and other big animals. Now none of those trees are there, and all the wild animals migrated to other places. This is the best example of human impact on the environment'*. An adolescent boy in Community B added that the destruction of the forest has not been sufficient to offset population growth and that access to grazing land is still limited: *'More Afar people come to this place to get the grass. So the grass is depleted'*. A key informant in Community A noted that, for Afars, who, in Zone 5, have traditionally taken their livestock to the Amhara highlands when local grasses have died off, increased population density is also leading to increased conflict. He said: *'The major problem was conflict that often occurred with the hosting community, which was mainly caused by getting access to grazing land and water'*.

Sustainable development is also hampered by gender norms that leave girls and women socially and economically marginalised and often unable to do and become what and who they wish. In both Zone 5 and East Hararghe, girls are subject to child marriage, girls and women have limited access to decision making and mobility, and sexual and gender-based violence (including female genital mutilation/cutting) is rampant. Critically, in terms of current livelihoods and the schooling necessary to preparing young people for the future, women's and girls' opportunities are limited by their responsibility for unpaid domestic and care work. A 15-year-old married girl from East Hararghe's Community J explained: *'We have a separate work culture in this area. We girls should prepare food, collect firewood, clean the house or compound'*. A woman from Zone 5's Community A added that climate change is exacerbating women's workloads. She said: *'It is today that women have work burdens. In earlier times... it was raining. We were able to find grass for animals around the house. There was sufficient milk... Now we have to take goats far away for grazing. We have changed our feeding style. We bake bread now because we can no longer depend on milk for food, so we need fuelwood for cooking. It is from very far away places that we can find fuelwood'*. Respondents in both East Hararghe and Zone 5 highlighted that climate change has made fetching water far more time intensive. A kebele official from Zone 5's Community M explained, *'In the past women fetch water from streams located in nearby areas but most them are dried due to recurrent drought. Now they fetch water from the river which takes between 2 and 3 hours'*.

3.2. A Twin-Track Approach to Sustainable Development

Given lowland livelihoods and the myriad stressors they are subjected to, sustainable development that supports the development of adolescents' broader capabilities requires a twin-track approach that combines investments in current livelihood strategies—enabling people to meet day-to-day needs—with increased efforts to prepare children and adolescents for the non-agricultural futures that will inevitably become more common as existing stressors intensify (see Figure 1). Our research finds that this is rarely happening in Zone 5 and East Hararghe. In the former, households are struggling to meet survival needs and are unable to prioritise investments in children's education. In the latter, expanded opportunities to earn an income are diverting adolescents from education. In both contexts, girls are paying the highest price for the government's inaction.

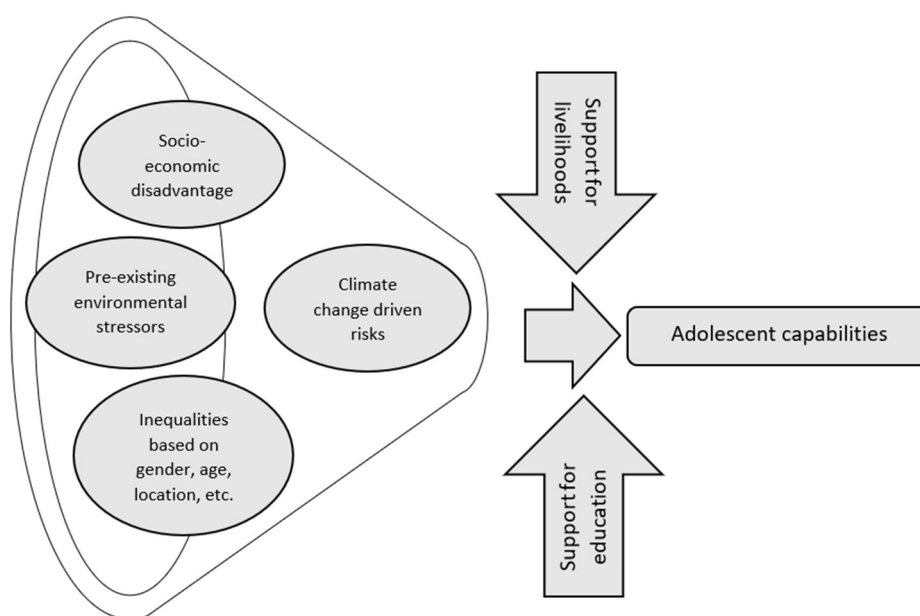


Figure 1. Threats to adolescent capabilities and the need for a twin-track approach.

3.2.1. Supporting Lives and Livelihoods

Zone 5

In Zone 5, research participants' perceptions of the government's development agenda were almost entirely shaped by where they lived. In the villages closest to the woreda town, all part of Community A, there was widespread agreement that access to the infrastructure and services that support lives and livelihoods had improved significantly in the past five years. A father in that community acknowledged the government's role in this: *'The government official that is found at region, zone, woreda and kebele level was coming'*. In more distant villages, however, narratives overwhelmingly centred around continued underdevelopment. A male community key informant from Community B stated: *'I think the government knows the people who are at the forefront, but we are very far'*.

In the more central villages of Community A, research participants spoke enthusiastically about improved access to water, electricity, health, and veterinary and extension services. A father explained that potable water is now being piped in from the woreda town after efforts to dig a local well failed: *'The water we drink now is not from here. It was extended from another area by pipeline'*. Community key informants in Community A noted that health services and veterinary services have also been expanded recently. One man said: *'Nowadays, there is a health post in the nearby place...and we have good access to veterinary services for our livestock'*. Several adult men also spoke of recent government efforts to encourage people to diversify livelihoods by encouraging households to grow crops as well as raise livestock. One reported: *'They also educated us to start ploughing land'*.

Even in Community A's more distant villages, however, interviews centred not on progress but on stasis. A young man from Community N explained, *'Officials from the zone and woreda levels do not want to listen to our questions. They warn us to raise our questions to the officials who live in the woreda town, but they do not know the main problems of the people here'*. A father from Community B added, *'No government body raises the name of Community B. We are crying many times but no one hears us'*. For example, with the caveat that government plans for improvement in the area have been slowed by recurrent clan conflict, which is becoming more frequent and more protracted due to competition over resources, respondents observed that the infrastructure in more remote communities remains extremely underdeveloped. Unsurprisingly, given that Zone 5 is a desert, most people's priority in interviews was to talk about water. In the more remote villages of Community A, research participants reported that piped water was often unavailable, because supplies ran low in town and because pumps often fail. A male community key

informant reported: *‘the people who instal the pipeline never do it well’*. In Community N, the kebele chair reported that the pipeline had failed entirely, leaving women to spend hours a day fetching water from a river that is *‘full of human wastes from towns’* and children to *‘suffer from waterborne disease’*. In Community B, where there are no wells or water pipes, younger adolescent boys added that transport infrastructure is also underdeveloped in Zone 5. With no bridge crossing the Awash River, there is no way to access markets. They explained, *‘There is Awash River in the middle so we swim and cross the river’*, and *‘We don’t have market places near our locality’*.

Respondents also spoke at length about the lack of services in more remote communities. For example, a male community key informant from Community B reported that the local health centre stands empty, leaving villagers to carry ill and injured persons for many kilometres, increasing the risk of death. He said: *‘The health expert who was assigned here isn’t present and he is taking his salary without serving us’*. The father of a younger boy from that community added that veterinary services are unavailable for the same reason, which is of increasing concern given that drought and locust invasions have exacerbated the risk of disease among livestock. He asked, *‘Have you seen the agricultural centre there? It is as it was, with no professionals, no necessary services. There is just the empty building. We reported [this] several times to the woreda pastoralist office but they replied with nothing’*. A young man from Community N noted that, despite increased environmental stress—and decreased livelihoods—those living in more remote areas of Zone 5 also have too little access to social protection. He stated, *‘Our natural environments are invaded by the parthenium weeds. Our trees were eaten by locusts last year. . . But we do not get any PSNP and other emergency food support during the worst dry season. . . We feel that we are completely forgotten, neglected and marginalised by the government’*.

Noting first that adolescent participants did not discuss local livelihoods other than pastoralism, adult residents of more remote villages also highlighted how few efforts have been directed at helping them diversify their incomes to compensate for the declining capacity of the land to support pastoralism. A mother from Community B explained that the government has neither supported them to learn agricultural skills nor invested in the irrigation that would make farming possible: *‘Some of the areas in Afar region start to produce crops such as corn and cotton and they are supporting themselves from the income obtained from the sale of these crops. They use a motor pump to water their plants. But in our community, the government has not done anything to support people to start farming activities. We are still dependent on herding our cattle and goats’*. Another mother, from a more distant village around Community B, added that women’s attempts to harvest—and monetise—the shrubs taking over grazing land were actively discouraged. She said, *‘There are also police prohibiting us from cutting trees for charcoal so we are not selling it’*. A father from Community B, from a household that is better off and was able to invest in a water pump, noted that even the minimal support that would have enabled his success was unavailable, leading him to abandon his efforts to diversify. He recalled: *‘Some five years ago, I tried to cultivate crops with my relatives. . . We even bought a water pump from the town and tried to use the river water, but after some time, the pump became un-functional because none of us had the skill and knowledge to operate and use it properly. . . I stopped trying such type of work without knowledge and skill’*.

Although a father in Community A claimed that, due to government policy, *‘females have better respect and dignity than males’*, broader narratives underscore that far too little attention is being paid to the gender norms that restrict the capabilities of girls and women. Service providers admitted that they are often afraid to support the girls who are trying to avoid child marriage or the wives who have reported domestic violence because they fear retaliation. Several spoke openly about the number of girls and women who are fleeing to Djibouti and the Middle East, and of rising suicide rates, as some girls and women choose the only path they perceive as open to them to escape their plight. A woreda-level key informant reported: *‘I know a girl who recently abandoned home and left to go abroad through Yemen to avoid forced marriage. There are also girls who took poison to attempt suicide, which is more related to unwanted marriage’*. Women who are meant to be promoting girls’ and

women's interests added that they had received little training and were unsure about how to deliver on objectives. A female, kebele-level key informant from Community A reported: *'I don't know what I will do, and also my responsibilities. I know only the name of my position'*. Efforts to support girls and women to secure independent livelihoods are even more limited. Respondents reported that girls and women have no access to savings groups, credit, or work cooperatives. When asked whether young women can organise themselves for self-employment, an older girl from Community A explained that *'Our locality is rural and... "cooperatives" are new for us, we have not tried them'*. Indeed, the only paid work mentioned by girls and young women in Zone 5 involved migrating to other countries in the Middle East and North Africa (MENA) region to participate in the international maid trade. Sometimes this migration was voluntary, with girls prioritising their own interests; other times, girls were forced into migrating to contribute to household incomes. A 12-year-old girl from Community A, whose mother has heard messaging about how risky such migration can be, commented that, *'My father wants to send me to Jeddah [Saudi Arabia] and my mother opposes him... She once told him that he will send me to Jeddah only over her dead body'*.

East Hararghe

In East Hararghe, respondents' narratives during the midline research centred around rapid, recent improvements to lives and current livelihoods. Transportation infrastructure—roads and bridges—was singled out as the most important driver of progress. A grandmother from Community I exclaimed, *'Thanks to Allah and may God give long life for this government now the road is constructed for us!'* Adults and adolescents reported that recently gravelled roads had enabled vehicular access to larger markets, which had promoted income diversification, expanded profit margins, and increased incomes and consumption, as *'husbands handle the farming activities and wives make money'* (15-year-old girl, Community I). An 18-year-old boy from Community I explained, *'It created lots of job opportunities... What they used to sell here for 100 birr, when they now take to the market at town, they sell for 300 or 400 birr'*. A 13-year-old boy from Community J added: *'It helps all the people to improve their wealth... Our living conditions have been improving'*. Respondents noted that improved transport was also resulting in better access to health care. A woman from Community H explained, *'In relation to health, there are remarkable changes related to community health and access to health services... now, we have a road and the government also provides free ambulances to transport mothers in labour'*.

With exceptions, access to drinking water, solar-powered light, and veterinary services has also improved in the communities in which GAGE is working. Adolescent girls—who bear primary responsibility for keeping their households provisioned—reported that most kebeles, except Communities I and L (where water collection continues to take up to six hours a day), now have public water taps. In communities that still rely on shallow wells or surface water, adolescents noted that the government is providing households with disinfectants. A younger boy in Community K said, *'Our family also always treats drinking water with wuha agar... It is free... from the agricultural office'*. Veterinary services have also expanded in recent years. A 13-year-old girl from Community I, who reported that her family's goats had all died of disease linked to drought several years ago, noted that today's flocks are healthier: *'There are experts who treat animals. They came here and injected our goats'*. Interestingly, there were no mentions of investments in irrigation in discussions with participants about recent progress in East Hararghe. Given that agriculture is dependent on rainfall—which, as noted earlier, is becoming ever more erratic—this is an inexplicable absence that may speak to residents' relatively short-term event horizons, which, at the moment, are focused on maximising immediate earnings.

In East Hararghe, in sharp contrast to Zone 5, adolescents' work may be separated from broader household livelihoods. This has important implications for sustainable development given the need to adapt livelihoods to account for climate change and Ethiopia's growing youth population. However, because younger adolescents are best served by focus-

ing on their schooling (rather than working) and because gender norms shape adolescents' trajectories, it is vital to take a gender- and age-disaggregated approach to this disentangling.

Adolescent boys work almost exclusively alongside their fathers, unpaid, on family farms. Younger boys do not perceive this to be problematic, though it can limit their school enrolment and attendance (see below). However, when boys marry—which many do by late adolescence—it is not uncommon for them to feel trapped by this arrangement. Because boys cannot expect to inherit farmland until after their father's death and because many would like to live separately with their wife, married boys expressed great interest in supplemental work opportunities. An 18-year-old married boy from Community I explained, *'It is after getting married that youngsters take up different job opportunities to improve their life conditions'*. Boys noted, however, that opportunities for waged work are rare in rural East Hararghe and that government officials have largely ignored the needs of youth. An 18-year-old boy from Community I reported that he and his friends had approached the kebele administrator many times about wanting to start their own business, but *'nobody was willing to listen to us'*. Indeed, although 30% of boys in South Gondar's highlands reported on GAGE's midline survey that they had access to the formal sources of credit that might help them launch their own business and 42% reported having access to informal credit sources, in East Hararghe, figures were only 3% and 12%, respectively [37].

Adolescent girls' and young women's work opportunities are markedly different than those of their male peers. Younger girls are far more likely to work for pay than younger boys, with concomitant impacts on their access to education (see below). Once a girl marries (which they increasingly do by the age of 12), her income-generating opportunities become locked to those of her husband and the marital family. When they are not doing unpaid, household labour, girls are responsible for marketing the crops grown by their husband and male in-laws. This means that married girls—like their husbands—feel trapped by customs that deny young couples their own land and leave them dependent on their elders. A 15-year-old married girl from Community I reported that she wished she and her husband could separate their household. She stated: *'It would be possible to work and harvest the outcomes for oneself instead of working for the benefit of others. Each of the households will work and harvest benefits according to their ability'*. Young women who have been married for some time and have children added that they simply wished for time to independently earn. An 18-year-old married girl from Community K recalled, *'I used to have my own source of income on those days. I am totally dependent on my husband's pocket currently'*.

3.2.2. Supporting Education

Zone 5

With the caveat that only half (50%) of adolescents in Zone 5 who completed our survey were enrolled in school at midline [38], in the more central villages of Community A—where secondary school, water, and solar-powered lights are accessible—most young people now attend school. A 16-year-old boy from that kebele observed that, *'Parents are today sending their children to school. Adolescent boys and girls in our locality are also interested to learn'*. A father from the same community noted that enrolment has grown in tandem with government and non-governmental investments in educational infrastructure and awareness-raising. He explained, *'The government officials educated us about the importance of education for us and our children'*. A mother added that parents' commitment to educating their children is shaped by a growing understanding that pastoral livelihoods are not sustainable in the face of climate change. She said, *'Unless they are educated, they can't survive, because there are not enough cattle'*. Adolescents admitted that they were most attracted by the financial payoffs to education and the salaried work it might facilitate. A 10-year-old girl from Community A explained, *'I need to be a teacher. I need to get better money'*.

Echoing earlier themes, outside of Community A's more central villages, interest in, access to, and uptake of education is markedly lower. This is partly due to the different occupational aspirations held by adolescents who live in Zone 5. With few role models demonstrating alternative paths, it is the only one of GAGE's research locations where

any significant proportion of young people intend to work in agriculture or homemaking rather than pursue the professional careers that require education beyond literacy. Of older cohort adolescents, approximately half of those who completed our midline survey reported wanting to pursue pastoral livelihoods in adulthood (44% of boys versus 52% of girls) [38]. With the caveat that educational and occupational aspirations are partly shaped by adolescents' desire to maintain Afar's pastoralist culture—which is deeply intertwined with pastoralist livelihoods—our research suggests that the main reason why the aspirations of adolescents in this region are 'lower' is that they have such limited access to formal education.

More remote young people's access to school is limited by myriad factors [39,40]. Many villages have no school at all. Many of those that do have a school have school buildings that are falling down, have no teachers (because teachers cannot tolerate living conditions in what has been identified as the hottest inhabited location on the planet), offer only a few grades, or do not provide drinking water to students whose daily commutes involve miles of trekking through the desert. As a 16-year-old boy from Community B commented, *'In our locality there is no good schooling... There is no teacher and also our school was destroyed by wind and rain'*. A mother from that same community added, *'We don't want to have children who are not in school... but they can't get water and food at school, so they run away from us'*.

Access to education is also limited by the daily demands of pastoralism in an environment in which basic services—and social protection—remain largely unavailable. As a mother in Community B observed, it is not possible to consider education until survival needs are met: *'Afar are striving to survive... How could a man think about education? It can't be thinkable'*. Households depend on young people's labour, especially for fetching drinking water and herding animals. Because even those living in the most remote villages understand that *'education is important... it is a good way of moving out of poverty'* (mother, Community B), where schools are available, many households endeavour to send children as often as practically possible, sometimes rotating herding responsibilities among school-aged children to facilitate this. A 10-year-old girl from one of Community A's more distant villages explained, *'I miss class every other day so as to keep the goats'*. This is becoming more difficult, however, in the face of climate change—because young people are increasingly required to go further afield in order to secure fodder for livestock. A 17-year-old boy from Community A reported that the recent plague of locusts has impacted uptake of education even in more central villages. He stated, *'Many students are becoming absent from the school since their parents send them to keep animals in the faraway areas'*.

In Zone 5, where the average, enrolled, older cohort adolescent had barely completed fifth grade by the time of our midline survey, the gender dynamics of young people's access to education shift during adolescence. Through early adolescence, girls are more likely to be enrolled in school than boys (64% versus 57%) [38]. This is because girls herd shoats, which can be tended locally, whereas boys also have responsibility for cattle and camels, which require better pasture and, so, more travel. A 13-year-old boy from Community B, referring to the seasonal migration that pulls many of his classmates out of school for months at a time, noted: *'They are pastoralist, and they would go in search of pasture'*. Among older adolescents, boys are more likely to be enrolled than girls (40% versus 28%) [38]. This is because not only does marriage end girls' access to education—only 8% of ever-married Afar girls in our sample were enrolled—but girls are removed from school to prevent them from refusing a traditional, arranged cousin marriage. A father from Community A explained: *'The main reason we don't send a girl to school is that she doesn't respect her parents and obey the rule. She will not marry an absuma [cousin specified for marriage]'*. Community commitment to preventing girls from accessing higher education is so strong that several of the girls who have made it to secondary school reported that they had endured years of beatings just to attend school. A 19-year-old, enrolled in the 12th grade, recalled, *'My family were telling me repeatedly that learning was not good... [Her uncle] was tying and beating me... not allowing me to go... I was the one who pushed hard to reach this level'*.

East Hararghe

In East Hararghe, where most communities have schools that provide eight years of education—albeit with teachers who often rely on violent discipline to control overcrowded classrooms—narratives surrounding interest in and uptake of education are markedly different. Most adolescents have high occupational aspirations. Indeed, of the younger cohort of adolescents, more than four-fifths (82%) of girls and boys aspire to professional work [38]. Although older adolescents' aspirations have begun to reflect reality, they are similarly high. However, their chances (and especially girls' chances) of achieving these aspirations are low given enrolment and attainment levels. Even in early adolescence, just two-thirds (65%) of the girls in East Hararghe who completed our midline survey were enrolled in school. By late adolescence, less than one-third was enrolled (31%) [38].

For boys, limits on education are the result of trade-offs made—first by caregivers and then by boys themselves—weighing up the short- and longer-term payoffs of education versus work in a context in which the economy is driven by agriculture and 'educated jobs' are rare. The boys most likely to be absent and leave school are those whose households cannot afford to invest in education—and those who cannot resist the allure of the recently expanding cash economy. A father in Community I explained: *'Farming can only be sufficient for consumption. It is impossible for the father of the child to cover the needs of school expenses for several children'*. Although the boys most tempted to leave school for work are those who are married and have their own households to support, a 13-year-old boy from Community L added that even younger boys are attracted by pocket money. He said, *'It was my own choice to be absent at that time. My parent was urging me to attend the school... I went out to work on trucks to earn money'*.

For girls, limits on education are the result not only of trade-offs but also of restrictive gender norms. Limits start with girls' disproportionate responsibility for domestic work. Mothers, struggling to juggle multiple, competing demands on their own time, admit that they appropriate their daughters' time. A mother from Community H reported, *'When we order them for several chores, this will affect their education'*. Girls acknowledge that constant demands interfere with learning. A 12-year-old girl from that same community stated: *'Girls clean the house and go to fetch water. By the time they go to school, it is already late. She just sits in class. By the time she goes home, there is a lot of work to do... She thinks about those things [and] she is not attentive to what is going on in the class. She is physically in class... but you will not understand it even if it is poured into your brain like water'*.

Girls' access to education is also limited by their engagement with paid work [41]. Our midline survey found that 18% of those in the younger cohort had done paid work in the past year (versus 8% for boys) [37]. Unmarried girls in East Hararghe are heavily involved in khat production, because employers see them as more diligent workers than boys. A father from Community H explained: *'The khat farm owners are more interested in girls since they don't chew khat'*. Girls not only work on khat farms, but they also engage in a wide variety of self-employment activities. Although teachers report that girls *'prefer to earn money than attend school'*, girls report that they work because they cannot afford to attend school. Unlike boys, however, this is less because households are poor and more because caregivers are unwilling to spend on girls' education. Indeed, girls quite often report that girls' education is so undervalued by parents that girls' own incomes are appropriated to fund their brothers' education. A 12-year-old girl from Community K, who runs her own business (selling snacks), stated, *'I can't return to school... I do not have anyone to buy me school materials... My brother goes to school... When he comes to us, my mother gives him my money'*.

Child marriage—which many girls 'choose' in order to escape the chores their mothers heap on them—also limits girls' uptake of education. In East Hararghe, only 8% of ever-married girls in our sample reported being enrolled in school [38]. *'In this area, I haven't seen any person who continues to go to school after getting married'*, noted a 15-year-old girl from Community H who married at age 13. A 14-year-old girl from Community I, who married at age 12, added, *'attending school is unthinkable for married girls, rather she is supposed to work [on] household chores'*.

As could be predicted, given that the average, enrolled, older cohort adolescent had barely reached 6th grade by the midline, secondary school attendance is rare in rural East Hararghe [38]. Respondents noted that the barriers that hamper younger students' participation in education are amplified for their older peers. Because secondary schools are clustered in more urban areas, attendance requires either lengthy daily commutes—which carry real costs for transport and opportunity costs in terms of forgone time for labour—or boarding in town, which is far more expensive than most rural families can afford. Due to widespread beliefs that girls are hypersexual and must be kept at home in order to control their behavior, girls' access to secondary school is especially limited. A grandmother from Community H reported, *'they [their parents] don't trust girls'*. A 17-year-old girl from Community I added, *'From our kebele there are only three individuals who are learning in grade 10, 11... All are boys... Girls do not go anywhere'*.

4. Conclusions and Implications

Young people growing up in the lowland areas of Zone 5 and East Hararghe are at increasing risk of being left behind as Ethiopia pursues its goal of becoming a middle-income country. Although there has been recent progress in supporting lives and livelihoods in these areas and furthering access to education, progress is building on a low base; it has been slower than that seen in other regions, is not directed to the remote communities that need support the most, and is jeopardised by growing environmental stress. Critically, in terms of supporting truly sustainable development by preparing young people to flourish and pursue a future that they find personally meaningful, there has been far too little attention paid to trade-offs between today's lives and livelihoods and education. In Zone 5, adolescents and their caregivers face unenviable compromises; unable to adequately invest in education because short-term survival needs come first, they are nevertheless well aware that longer-term survival—especially in the face of climate change—depends on education. In East Hararghe, underinvestment in education is increasingly shaped by the reverse dynamic. Opportunities to engage with the burgeoning cash economy (as long as the rain lasts) make investments in schooling seem futile—especially for girls, who are also cognisant that they are primarily valued for their reproductive roles.

If the government of Ethiopia and its development partners are to deliver on the SDGs, our research findings suggest they need to pay far more attention to the diverse—and unequally distributed—economic, social, and environmental risks facing young people as they approach adulthood. To support those living in Ethiopia's lowland areas, we suggest four broad clusters of policy and programmatic actions.

First, investments in infrastructure and services are vital to support lives, livelihoods, and livelihood diversification. Efforts should be made to expand access to water for human and agricultural use and to improve the transport infrastructure that facilitates access to markets. Health and veterinary services also need to be strengthened, with particular attention paid to working with religious and clan leaders to slow population growth. Young people, who have more limited land rights and skillsets, would particularly benefit from access to financial education and services—and skills training—so that they might launch their own income-generating activities (e.g., beekeeping or producing briquettes from recycled biomass). Because younger people are also at heightened risk of participating in and experiencing violence, they would benefit from stepped up efforts aimed at preventing and managing conflict over scarce resources. Given the depth of poverty in many lowland communities, especially given increasing environmental stress, social protection programming must be scaled up to meet need.

Second, investments in education are fundamental. In pastoralist areas, such as Zone 5 in Afar, prioritising the construction of schools and ensuring that they have drinking water is key. Other important interventions include expanding access to secondary school by building more schools in more communities, building roads (and perhaps providing bicycles) to facilitate access, and offering affordable and safe boarding options to students who cannot commute. Especially in Zone 5, but also in East Hararghe, there is a concomitant

need to train and hire more teachers, particularly female teachers to demonstrate alternative pathways for girls. Stepped-up—and carefully tailored—efforts to raise awareness about the importance of education should be paired with incentives (e.g., stipends or school feeding) designed to encourage young people and their families to invest in education and programming (e.g., exposure to role models or public recognition ceremonies) that inspires and empowers them to break the local mould and strive for more.

Third, greater investments must be made in protecting the natural environment on which current and future lives and livelihoods depend. This should include protecting remaining natural forests, including through the provision of cook stoves and solar lights that would also reduce demands on girls' and women's time. It should also include immediate and stepped-up efforts to remove invasive plant species, which are vital for preventing them from spreading further and restoring natural vegetation. To that end, the Prime Minister's 'Green Legacy', to date prioritised in upland areas, must be extended into lowland regions.

Finally, given the intersecting disadvantages that girls and women face, it is essential to support girls and women by addressing the broader gendered norms that limit the development of their broader capabilities. This will require work with communities, parents, and adolescents, ideally in partnership with religious and clan leaders. Broader efforts should be paired with specific programming aimed at eliminating child marriage; empowering adolescent girls to build their aspirations, agency, and capacity to withstand pressure from their parents, peers, and broader communities; and work with adolescent boys and young men to address the harmful masculinities that leave girls at risk of sexual and gender-based violence.

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References

1. UNDP—United Nations Development Programme Ethiopia. *Study on Women in Manufacturing in Ethiopia: Opportunities, Challenges and Strategic Interventions*; UNDP Ethiopia: Addis Ababa, Ethiopia, 2018.
2. World Bank. *Ethiopia Poverty Assessment: Harnessing Continued Growth for Accelerated Poverty Reduction*; World Bank: Washington, DC, USA, 2020.

3. UNESCO Institute for Statistics. Available online: <http://data.uis.unesco.org/> (accessed on 25 March 2022).
4. Central Statistical Agency of Ethiopia (CSA) and ICF. *Ethiopia Demographic and Health Survey 2016*; CSA and ICF: Addis Ababa, Ethiopia; Rockville, MD, USA, 2017.
5. United Nations Development Programme (UNDP). Human Development Report 2020. In *The Next Frontier: Human Development and the Anthropocene*; UNDP: New York, NY, USA, 2020.
6. Ethiopia: Events of 2021. Available online: <https://www.hrw.org/world-report/2022/country-chapters/ethiopia> (accessed on 25 March 2022).
7. Byrne, N. Extreme Drought, Worsened by Global Climate Change Rages through Ethiopia. Trócaire Website, 17 June 2021. Available online: <https://reliefweb.int/report/ethiopia/extreme-drought-worsened-global-climate-change-rages-through-ethiopia> (accessed on 30 March 2022).
8. World Bank. *Climate Risk Country Profile Ethiopia*; World Bank: Washington, DC, USA, 2021.
9. World Bank. *Ethiopia Regional Poverty Report: Promoting Equitable Growth for All Regions*; World Bank: Washington, DC, USA, 2020.
10. National Planning Commission (NPC). *Growth and Transformation Plan II (GTP II) (2015/16–2019/20)*; Government of the Federal Democratic Republic of Ethiopia: Addis Ababa, Ethiopia, 2016.
11. Our Work on the Sustainable Development Goals in Ethiopia. Available online: <https://ethiopia.un.org/en/sdgs> (accessed on 25 March 2022).
12. Sachs, J.D.; Kroll, C.; Lafortune, G.; Fuller, G.; Woelm, F. Sustainable Development Report 2021. In *The Decade of Action for the Sustainable Development Goals*; Cambridge University Press: Cambridge, UK, 2021.
13. Population, Total–Ethiopia. Available online: <https://data.worldbank.org/indicator/SP.POP.TOTL?locations=ET> (accessed on 25 March 2022).
14. United Nations. *World Youth Report 2018*; Youth and the 2030 Agenda for Sustainable Development, United Nations: New York, NY, USA, 2019.
15. Sen, A.K. *Commodities and Capabilities*; Oxford University Press: Oxford, UK, 1984.
16. Sen, A.K. Capabilities, lists, and public reason: Continuing the conversation. *Fem. Econ.* **2004**, *10*, 77–80. [CrossRef]
17. Kabeer, N. *Making Rights Work for the Poor: Nijera Kori and the Construction of “Collective Capabilities” in Rural Bangladesh*; Working Paper 200; Institute of Development Studies: Brighton, UK, 2003.
18. Nussbaum, M.C. Creating Capabilities: The Human Development Approach. *Hypatia* **2008**, *24*, 211–215. [CrossRef]
19. Cochrane, L.; O’Regan, D. Legal harvest and illegal trade: Trends, challenges, and options in khat production in Ethiopia. *Int. J. Drug Policy* **2016**, *30*, 27–34. [CrossRef] [PubMed]
20. Gudata, Z.G.; Cochrane, L.; Imana, G. An assessment of khat consumption habit and its linkage to household economies and work culture: The case of Harar city. *PLoS ONE* **2019**, *14*, e0224606. [CrossRef] [PubMed]
21. Tefera, T.L. Supply response, local reality and livelihood sustainability: The policy dilemma of khat (*Catha edulis*) production in eastern Ethiopia. *Int. J. Agric. Sustain.* **2009**, *7*, 176–188. [CrossRef]
22. Tiruneh, S.; Tegene, F. Impacts of climate change on Livestock production and productivity and different adaptation strategies in Ethiopia. *J. Appl. Adv. Res.* **2018**, *3*, 52–58. [CrossRef]
23. Tigabu, D.G.; Gebeyehu, M.F. *Enhancing Youth Employment Opportunities in Rural Economies in Ethiopia*; Research Report 5(3); Forum for Agricultural Research in Africa: Accra, Ghana, 2020.
24. Teshome, A.; Zhang, J. Increase of extreme drought over Ethiopia under climate warming. *Adv. Meteorol.* **2019**, *2019*, 5235429. [CrossRef]
25. IGAD Climate Prediction and Applications Centre (ICPAC). *Report on Historical Climate Baseline Statistics for East and West Hararghe, Ethiopia Vol 2*; ICPAC: Nairobi, Kenya, 2020.
26. Bogale, G.A.; Tolossa, T.T. Climate change intensification impacts and challenges of invasive species and adaptation measures in Eastern Ethiopia. *Sustain. Environ.* **2021**, *7*, 1875555. [CrossRef]
27. Shiferaw, W.; Demissew, S.; Bekele, T.; Aynekulu, E. Relationship between *Prosopis juliflora* invasion and livelihood diversification in the South Afar region, Northeast Ethiopia. *Reg. Sustain.* **2020**, *1*, 82–92. [CrossRef]
28. Tamado, T.; Milberg, P. Weed flora in arable fields of eastern Ethiopia with emphasis on the occurrence of *Parthenium hysterophorus*. *Weed Res.* **2008**, *40*, 507–521. [CrossRef]
29. Zuberi, M.; Gosaye, T.; Hossain, S. Potential threat of alien invasive species: *Parthenium hysterophorus* L. to subsistence agriculture in Ethiopia. *Sarhad J. Agric.* **2014**, *30*, 117–125.
30. Salih, A.A.M.; Baraibar, M.; Mwangi, K.K.; Artan, G. Climate change and locust outbreak in East Africa. *Nat. Clim. Chang.* **2020**, *10*, 584–585. [CrossRef]
31. Locust Swarms and Climate Change. Available online: <https://www.unep.org/news-and-stories/story/locust-swarms-and-climate-change> (accessed on 25 March 2022).
32. Ministry of Education. *Education Statistics Annual Abstract September 2019–March 2020*; Ministry of Education, Federal Democratic Republic of Ethiopia: Addis Ababa, Ethiopia, 2020.
33. Central Statistical Agency of Ethiopia (CSA). *Statistical Report on the 2020 Urban Employment Unemployment Survey*; CSA: Addis Ababa, Ethiopia, 2020.
34. Dom, C.; Vaughan, S. WIDE Bridge. In *Policy Review–First Quarter 2018*; Mokoro: Oxford, UK, 2018.

35. GAGE Consortium; Gender and Adolescence. *Why Understanding Adolescent Capabilities, Change Strategies and Contexts Matters*, 2nd ed.; Gender and Adolescence: Global Evidence: London, UK, 2019.
36. Jones, N.; Presler-Marshall, E.; Małachowska, A.; Jones, E.; Sajdi, J.; Banioweda, K.; Yadete, W.; Gezahegne, K.; Tilahun, K. *Qualitative Research Toolkit: GAGE's Approach to Researching with Adolescents*; Gender and Adolescence: Global Evidence: London, UK, 2019.
37. Presler-Marshall, E.; Dutton, R.; Jones, N.; Baird, S.; Woldehanna, T.; Yadete, W.; Amdeselassie, T.; Emirie, G.; Gebreyehu, Y.; Gezahegne, K.; et al. *'We suffer to Survive': Exploring Adolescent Opportunities and Challenges in Securing Decent Work and the Foundations for Economic Empowerment in Ethiopia*; Gender and Adolescence: Global Evidence: London, UK, 2021.
38. Presler-Marshall, E.; Dutton, R.; Jones, N.; Baird, S.; Woldehanna, T.; Yadete, W.; Amdeselassie, T.; Emirie, G.; Gebreyehu, Y.; Gezahegne, K.; et al. *'My Husband Can Go to Work and I Will Go to My School': Exploring Changing Patterns in Adolescents' Access to Education and Learning in Ethiopia*; Gender and Adolescence: Global Evidence: London, UK, 2021.
39. Woldesenbet, P. Provision of and Participation in Primary Education in the Pastoralist Regions of Afar and Somali of Ethiopia. Ph.D. Thesis, University of Tampere, Tampere, Finland, 2015.
40. Yitbarek, S.; Wogasso, Y.; Meagher, M.; Strickland, L. Life Skills Education in Ethiopia: Afar Pastoralists' Perspectives. In *Life Skills Education for Youth. Young People and Learning Processes in School and Everyday Life*; DeJaeghere, J., Murphy-Graham, E., Eds.; Springer: Cham, Switzerland; Copenhagen, Denmark, 2022; Volume 5.
41. Negash, G. *The Education of Children Entangled in Khat Trade in Ethiopia: The Case of Two Khat Market Centers*; Forum for Social Studies: Addis Ababa, Ethiopia, 2017.