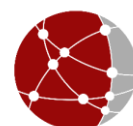




CLIMATE-FRAGILITY RISK BRIEF

ETHIOPIA

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Climate-Fragility Risk Brief: Ethiopia

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SUMMARY

Located at the heart of the Horn of Africa, Ethiopia has been a key security player in the region and beyond. Ethiopia can be an important catalyst for peace because of its economic, political and ethnic ties with surrounding countries. However, it can also be a significant source of instability if conflict risks are not managed proactively.

This briefing paper explores the linkages between climate fragility and security risks in Ethiopia by looking at how climate variability and change can contribute to existing tensions, thus further destabilising the country and having broader regional implications. It first reviews the socio-economic, political and security context and climatic conditions that characterise Ethiopia. It then proposes three mechanisms by which climate variability and change may interact with existing socio-economic and political variables to escalate tensions and conflict.

The central argument is that climate variability and change are likely to reduce agricultural yields and employment opportunities and increase natural resource and land scarcity, threatening the livelihood security of the large proportion of Ethiopians who, especially in rural areas, still largely depend on rain-fed agriculture and agropastoralism for their livelihoods. The distribution of resources is already skewed, and a reduction in food production could result in the increase in food prices and livelihood insecurity, contributing to the overall state of fragility. What is more, competition over scarce resources between communities can exacerbate existing tensions along ethnic lines and fuel migration to urban centres. Scarcity does not necessarily mean lack of resources; it can also be a matter of access to and the equitable distribution of resources. Therefore, the already-fragile situation can deteriorate further if decision-makers try to address livelihood insecurity through institutions that do not realise the importance of conflict sensitivity nor have the capacity to incorporate it in climate resiliency efforts.

This insecurity can trigger protests against the government if citizens believe it is failing to deliver on people's demands for food, jobs and basic services - or establish effective institutions that ensure equitable access to resources, prevent violence and enforce rules. Protests could, in turn, hamper or at least slow down existing political and economic reforms initiated by the current government. These risks go beyond national borders: given Ethiopia's central role in the Horn of Africa, domestic political instability could have repercussions at the regional level, including by invigorating ethnic militias and non-state armed groups (NSAGs). Increased climate variability and change also risks giving rise to regional tensions over the management of transboundary resources - as the case of the Gibe dam may indicate.

In conclusion, this briefing paper suggests four entry points for comprehensive policies that take into account these compound climate-fragility risks as they seek to prevent rising tensions and conflict.

1 SOCIO-ECONOMIC CONTEXT

Since the 2000s, Ethiopia has made significant progress in reducing poverty rates - going from 44% in 2000 to 27% in 2015/6 (World Bank, 2019a). This reduction is mostly due to agricultural growth and rural safety net programmes, as well as social spending on basic services (World Bank, 2015). Development indicators related to hunger, gender parity in primary education, child mortality, HIV/AIDS and malaria have also significantly improved since 2000.

Of course, steady economic growth has helped as well. Ethiopia has enjoyed strong and broad-based economic growth in the last decade, averaging 9.9% gross domestic product (GDP) growth annually from 2007/08 to 2017/18 (World Bank, 2019b). Its development was shaped around a strategy of agricultural development-led industrialisation, aiming at modernising agriculture, opening up agricultural markets and investing in infrastructure, social services and safety nets, especially in rural areas. The completion of the Grand Renaissance Dam - expected to be the largest hydropower dam station in Africa - and other water infrastructure projects such as the Gibe III Dam will likely enable Ethiopia to cover most of its energy needs (Gebreluel, 2014; ECC Factbook, 2019).

In 2018, the service sector made up an estimated 36.5% of Ethiopia's GDP, overtaking agriculture as the country's most important economic sector. Agriculture still accounted for 31% of GDP, industry for 27%, and manufacturing for 6% (World Bank, 2019b). Even though the service sector is now larger than agriculture as a source of GDP, the agricultural sector continues to employ a larger portion of the labour force, estimated at 66% in 2018 (World Bank, 2019c). Cultivators account for over 89% of the agricultural sector, while pastoralists account for 6% and agro-pastoralists for 5% (WFP, 2014).

Despite this strong economic growth and development progress, which were accompanied by a period of relative political stability, Ethiopia still lags behind in global development indices. As of 2018, Ethiopia's population was estimated at 109 million by the World Bank, making it the second most populous nation in Africa. According to the United Nations Development Program's (UNDP) 2018 Human Development Indicator (HDI), Ethiopia's HDI value for 2017 was 0.463, placing it in the low human development category (UNDP, 2018).

What is more, inequality has grown, especially between rural and urban areas and between regions and ethno-linguistic groups. The poorest segments of the population, which remain concentrated in rural areas, have become poorer than they were in the period 2005-2011 (World Bank, 2015). Household size, levels of education, access to irrigation and agricultural inputs, and proximity to markets were all critical factors explaining differences in poverty levels (World Bank, 2015). The dominant pastoral regions of the country (Afar and Somali) have the highest inequality rates, especially between rural and urban residents (Argaw, 2017).

The lack of job opportunities in rural areas is among the core reasons for migration - especially of young people - to urban areas. According to a recent study by IFPRI, 28% of young people in the Blue Nile Basin in the Amara and Oromia regions permanently migrated to urban areas between 2010 and 2014 (Kosec et al., 2017). However, this put enormous pressure on urban areas, which already have high rates of unemployment and often struggle to offer basic services and infrastructure to their growing population. This can result in dissatisfaction, which can have significant political repercussions. Take for example the 2015 protests for political and economic reform, which started at the outskirts of Addis Ababa but quickly spread to other urban and rural areas and eventually forced then-Prime Minister Hailemariam Desalegn to resign.



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2 GOVERNMENT, NATIONAL SECURITY AND CURRENT AFFAIRS

Ethiopia's economic boom would likely not have been possible without a change in political orientation and development strategies. After almost two decades of Marxist military government (the Derg), the country transitioned to a federal and parliamentary system when the new ruling party, the Ethiopian People's Revolutionary Democratic Front (EPRDF), took over in the early 1990s. Power was officially decentralised by dividing it between the Federal Government and nine Regional Administrations, defined along ethnic lines; the EPRDF itself is "a coalition of four ethnically-defined organizations" (Vaughan, p. 283, 2015).

There is no consensus on how effective the ethnic federal system has been. However, it is noticeable that in some cases it has contributed to reinforcing deep-rooted, historical grievances between ethnic groups and communities about the control of territory and natural resources. For example, there has historically been competition for land and water along the borders of Ethiopia's two largest regions - Oromia and Somalia (Adegehe, 2009). Under the system of ethnic regionalisation, these historical conflicts have become modern boundary conflicts. (Adegehe, 2009). Tensions boiled over in 2017, when ethnic Somalis were evicted from Oromia and Somalis retaliated by evicting Oromos from their region. The conflict has been deadly at times (BBC, 2017).

Beyond identity and competition over natural resources, there are also other issues in play, such as land ownership and foreign agricultural investments. In October 2018, for example, fights erupted between rival groups in the regional state of Benishangul-Gumuz, at the borders of Sudan and South Sudan, displacing 70,000 people and killing more than 20 (OCHA, 2018). Meanwhile, more than 200,000 ethnic Oromos have reportedly been evicted from this region since September 2018, and the regional leadership has accused members of the Amhara ethnic group of killing of 200 people over territorial disputes (Wilson, 2019). It's not just ethnic politics: the federal government's decision to deem Ethiopia's lowlands as suitable for agricultural investment has fuelled competition over the land and natural

resources. The investment decision has attracted large-scale foreign investment, but it pays no regard to historical land-use arrangements (Labzaé, 2019).

Overall, despite many positive reforms and signs of more democratic political environment, the government of Abiy Ahmed - who succeeded Hailemariam Desalegn in April 2018 after three years of popular protests forced him to resign - has not been able to end the political and ethnic violence (Caniglia, 2018). And Ethiopia's economy is struggling as well. Its foreign debt exceeds USD 24 billion, and the current leadership has had to ask for more money and better terms from international creditors (ICG, 2019). As a recent ICG report argues, "to empower Abiy to assuage the concerns of millions of unemployed youth, some of whom have been lured into ethnic militias, international partners should offer a substantial cash injection into the Ethiopian economy on an accelerated timetable" (ICG, 2019, p.30).

Security remains a challenge for Ethiopia today, perhaps even the most important one. Some parts of the country have seen repeated violence in recent years. In 2018, ethnic violence reportedly forced 1.4 million people from their homes - the highest number of internally displaced persons (IDPs) of any country in 2018, surpassing both Syria and the Democratic Republic of the Congo (IDMC, 2018). The ICG has noted that "insecurity has intensified and proliferated across the country, with communal violence tearing at the multi-ethnic fabric of Ethiopian society. Regional leaders demand more power" (ICG, 2019, p. i). Even though protests have lessened, communal violence has "spread and worsened and ethnic militias are growing in size and reach" (ICG, 2019, p. 21).

3 CLIMATE CONTEXT

The climate of Ethiopia is tropical in the south-eastern and north-eastern lowland regions while temperatures are cooler in the central highland regions (McSweeney, New & Lizcano, 2006, p. 1). The majority of rainfall - 50-80% - arrives during the Kiremt season (between June and September). Short rains during the Belg season (between February and March) provide rain to the southern, north-eastern, eastern and some central parts of the country (WFP, 2014).

Climate projections: Ethiopia



Projected increase of temperature of 1°C - 2°C by 2050



Erratic rainfall and increased unpredictability of seasonal rains



Increased incidence of drought and other extreme events

Key climate impacts:

Agriculture



- Reduced yields and/or crop failure
- Reduced soil moisture availability
- Increased evapotranspiration and water stress

Livestock



- Increased incidence of pests and diseases
- Reduced feed and water sources
- Increased livestock mortality

Water



- Reduced water quality and quantity
- Drying of wetlands and freshwater sources
- Disruption of hydropower generation

Human health



- Changing ranges of vector-borne diseases
- Increased risk from waterborne diseases

Future climate projections predict an increase in mean annual temperature, precipitation variability, and extreme weather (USAID, 2016; UNDP, 2006):

- **Country-wide upward temperature trend:** Ethiopia's mean annual temperature rose by 1.3°C within a few decades (from 1960 to 2006), averaging 0.28°C per decade (McSweeney, 2012). Climate models foresee a further warming of 0.7-2.3°C by the 2020s and of 1.4-2.9°C by the 2050s (FDRE, 2011).
- **More extreme and erratic weather patterns:** The overall expectation is of more regular heavy rainfalls, which should increase the incidence of floods (FDRE, 2011,) and reduce soil quality (FDRE, 2011).
- **Increased rainfall variability:** Historical data shows that there is already high rainfall variability from year to year, while the South and South-Eastern regions experience especially high variation, swinging between -25% and +36% of the mean (McSweeney, 2012). This variability can be further aggravated by climate change, although there is high uncertainty regarding long-term trends of rainfall patterns.

Whereas the Ethiopian Panel on Climate Change's simulations predict future overall increase of rain, a World Food Programme (WFP) analysis of climate impacts on food security and livelihoods in Ethiopia indicates that rainfall has actually been declining over the past decade (except for the north-western region, reaching out to the central part). The panel confirmed that "[d]uring the past 11 or 12 years, average rainfall conditions have been poor in most areas, more than 0.4 standard deviations below average" (Ethiopian Panel on Climate Change, 2015, p.58).

The WFP also highlighted some of the vulnerability trends resulting from climate variability and change, including the migration of pastoralists into cropping areas and of farmers into pastoralist areas to access land, as well as drought and livestock diseases. Many regions are already prone to climate vulnerability risks due to changing rainfall patterns; future (short and long term) climate changes will add to those vulnerabilities. According to a July 2019 food security outlook by the Famine Early Warning System Network (FEWS), poor production seasons (2018-19) have occurred as a result of drought, and certain areas of the country are expected to face crises - e.g. the lowlands of Oromia, north-eastern Afar, north-eastern Amhara, and the Somali region (FEWS NET, 2019). According to reports, the poor rainy season has left 15 million people across the Horn of Africa without access to food and water (Bhalla, 2019).

Ethiopia's National Adaptation Plan (NAP) identified agriculture in particular as a priority sector with regard to climate change vulnerability; the climate risks associated with agriculture (crop and livelihood) are frequent droughts and occasional floods, seasonal shifts in rainfall and temperature regimes, and extreme events including heat waves and storms (NAP, 2019). Agriculture plays an important role in both food security and employment, and the negative impact of increasing temperature and changing rainfall patterns will be felt throughout the sector, leading to livelihood insecurity and rising food prices. As noted in the previous section, the majority of Ethiopians work in agriculture. Given the connection between agriculture and livelihood security, there is a significant risk that such effects will intersect with the current political instability, especially ethnic tensions, and lead to or intensify conflict.



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4 CLIMATE-FRAGILITY RISKS IN ETHIOPIA

If climate vulnerability risks are not managed comprehensively, climate change threatens to be a threat multiplier in Ethiopia. Increased food prices and greater livelihood insecurity will combine with existing tensions to further diminish the capacity of local, state and federal institutions, which are already struggling to maintain stability and deliver services equitably and effectively while pursuing economic and political reforms.

There are three main potential drivers of fragility and conflict: (1) **Discontent over food and livelihood insecurity** - triggered, for example, by an increase in food prices and unemployment rates and the failure of institutions to address these problems - could worsen existing tensions, causing protests and diminishing the capacity and legitimacy of state authorities. (2) **Inadequately managed migration** - citizens often migrate as a coping mechanism for livelihood insecurity - could exacerbate existing tensions and, given the high levels of unemployment in migrant host areas and urban centres, facilitate recruitment into NSAGs. (3) **Increased unemployment and competition over scarce natural resources and land** due to increased livelihood insecurity could exacerbate existing inter-communal and inter-state divisions and conflict, providing fertile ground for the proliferation of ethnic militias and other NSAGs. In turn, this could contribute to state fragility and political unrest, with potential regional and international implications.

Each driver is further discussed in the subsections below, including possible regional implications such as the cross border spillover of ethnic tensions. Some of these scenarios for how climate fragility risks can compound are all too plausible, particularly in regions where the government is already struggling to maintain stability, such as Oromia, Somali (the region bordering Somalia), Afar and in the Southern Nations, Nationalities, and Peoples' (SNNP) Region,

4.1 Discontent over food and livelihood insecurity could undermine state authority

Dissatisfaction over food and livelihood insecurity exacerbated by climate change could lead to discontent - including among the emerging better-off and educated middle-class in cities - which can decrease the legitimacy of state authorities, leaving room for protests and political instability.

Climate impacts represent an imminent threat to Ethiopia's food security. Rainfall is an important determinant of food production because Ethiopia's agriculture is predominantly rain-fed. Higher and lower agricultural outputs are associated with wetter and dryer years, respectively. According to the WFP, most households across Ethiopia consider lacking or unpredictable rainfall a main contributing factor to their food insecurity and general vulnerability (WFP, 2014). In the past decade, several climate-related events in the Horn of Africa have made clear how floods and droughts impact food production, farmers' access to markets and agriculture-related income (WFP, 2014; Barter, 2019). A recent Oxfam report noted that climate change is making drought the new norm, not only in Ethiopia but in the wider Horn of Africa region. This is having particularly negative impacts on the poorest and most marginalised communities, which have low capacity and resources to recover from previous drought events (Barter, 2019).

The risks and potential impacts of climate change also extend to human health, which can be an additional factor contributing to worsening food and livelihood security. For example, under higher temperatures, malaria will likely expand to highland areas, and floods facilitate the spread of waterborne diseases like diarrhoea. More than 70,000 deaths annually are tied to indoor and outdoor air pollutants, which can be aggravated by a hotter, more drought-prone climate (USAID, 2016).

Increases in food prices - and especially the price of cereals - can exacerbate existing tensions. Although many variables influence crop yield and price, there is a notable correlation between rainfall and food prices in Ethiopia. For instance, "March-May and June-September rains appear to have stronger correlations with food prices" (WFP, 2014, p. 24). The impacts of low rainfall or drought events on cereal prices are even greater due to restrictions on cross-border trade, which affect food availability in markets - this was evident in the droughts of 2015 through 2017 (Government of Sweden, 2018). Discontent with increased food prices can encourage citizens to challenge authorities through protests if institutions lack the capacity to mitigate such situations. For example, some have postulated that climate change and increases in food prices played a role in the Arab Spring (Perez, 2013). This channel of conflict escalation is of particular concern for already historically marginalised communities in the regions of Oromia, Somalia and Afar.

The negative impacts of climate variability and change on food and livelihood security threaten the entire Horn of Africa, which continues to be exposed to significant risks of extreme events, rainfall variability and temperature increases. The region already experienced an unprecedented increase in food insecurity during extreme climatic events of 2011, 2015 and 2016. Already dealing with sustained population growth, high cereal prices, and the effects of conflict in some areas such as South Sudan, the region (especially its poorest and most marginalised groups) is especially vulnerable to such extreme climatic events. There is a risk of increased competition and more conflict, including across borders.

4.2 Migration could exacerbate existing tensions

Migration in itself is not a conflict risk and can indeed be an important coping mechanism for climate-affected communities. But if not managed comprehensively, migration both within rural areas and between rural and urban areas can exacerbate existing inter-ethnic tensions and create instability and conflict.

Changing climate patterns can encourage migration. Pastoral communities may migrate to cropping areas as pastures degrade, while farmers often move to lowlands occupied by pastoral groups in search of land or pasture. This can lead to clashes between the farmers and pastoralists that inhabit those areas, especially when the contested land is already suffering from degradation and water is already scarce. The conflict between the two pastoral groups in the Afar region, Afars and Issa-Somalis, is a good example: it began as a dispute over resources, but the involvement of external powers throughout history and the ethnic federalisation of Ethiopia have complicated and broadened the scale and impact of the conflict (Adegehe, 2009). Adding to this is the growth of agricultural farms and sugar plantations over the past half-century (Adegehe, 2009). However, "the prolonged and

recurrent droughts the area has experienced, particularly, since the mid-1990s” have reportedly also intensified the conflict (Hundie, 2010, p.140). Researchers estimate that “with further restrictions on rangeland accessibility, the threats of land degradation, negative climate change effects and violent conflicts over scarce remaining land and water resources will wreak havoc on the pastoral societies in Afar” (Sonneveld et al., 2017, p. 2).

Another mechanism whereby climate variability and change impact conflict risks is rural-to-rural migration. There is often a lack of employment opportunities for people migrating to other rural areas. When climate change impacts agricultural production and limits employment opportunities, migrant labourers can become “trapped” in host locations that are no longer able to provide temporary labour. Migrant agricultural labour is a key coping strategy for several areas of the country during drought and erratic rains (WFP, 2014). What is more, the labour migrants themselves become less resilient when there are not enough jobs in their usual destination regions (WFP, 2014). Those without jobs, in economic despair, constitute a pool of potential recruits for non-state actors (e.g. ethnic militias) that exacerbate the already-fragile security conditions.

Rural-to-urban migration can also fuel discontent. To escape livelihood and food insecurity, farmers and pastoralists in rural areas -especially young people - are increasingly moving to Ethiopia’s small towns and cities. A policy brief by the African Migration and Development Center on the link between poverty and migration in Ethiopia in 2013 found “bleak agricultural prospects in rural areas to be a factor driving migrants to the urban areas where it was believed that there were more opportunities” (African Migration and Development Center, 2016). People interviewed for the study stated that “the exorbitant costs of agricultural resources and lack of rural development” were some of the reasons for agricultural failure and poverty (African Migration and Development Center, 2016).

Ethiopia is simultaneously going through rapid urbanisation and a demographic transition, with the urban labour force having doubled in the last decades - it is expected to reach 82 million by 2030 (Alemayehu, 2019). However, urban services are failing to keep up with this growth - e.g. they face real challenges with the provision of sewerage, waste management, road density and water provision (Alemayehu, 2019). Migrating populations and frustrated urban elites alike will have to deal with these problems, which will contribute to an atmosphere of discontent with the authorities and possibly increase conflict.

Ethiopia’s Central Statistical Agency reports that the urban unemployment rate was 19.1% in June 2018 (2019). Current trends are likely to continue and even increase as rural employment opportunities dwindle due to the agricultural sector’s climate vulnerability. However, urban centres in Ethiopia are already struggling with high unemployment rates and the provision of basic services and infrastructure, such as access to sanitation and drinking water, housing, health facilities and schools. According to the ICG, “[d]isappointment and frustration are especially acute among job-seeking youths joining the country’s expanding labour pool only to find that there are few meaningful prospects” (ICG, 2019, p.30). These circumstances can add to the general atmosphere of dissatisfaction and cause protests, sometime even exacerbating discrimination and tensions between ethnic groups. A case in point was the protests of 2015 when Ethiopians - again, especially urban youth - demanded political and economic reform and an end to state corruption.

An increase in the number of refugees coming into Ethiopia from outside (mostly war-prone countries such as South Sudan, Somalia, Eritrea and Sudan) has also led to conflicts with the local population, which, like the refugees, is also hoping to access jobs in manufacturing or services (Barbelet et al., 2018).

This is not just about tensions between new arrivals and current residents: climate change could also exacerbate the tensions between Afars and Issa-Somalis, potentially with cross-border implications. In December 2018, a press release by Afar Forum condemned “the well-coordinated and planned attack against civilian Afars by Issa-Somalis in the Afar region of Ethiopia.” Issa-Somalis reportedly removed and burned the Afar regional flag, replacing it

with the Somali regional flag. The Forum also reported on demonstrators calling for the “illegal” Afar settlement area to be incorporated into the Somali region (Afar Forum).

The Djibouti government and Somalia are accused of arming the Issa-Somalis against the Afars. As the latter claim, “[t]here is credible sources and reports that the Somalis from as far as Somaliland, Djibouti and Somali regional state of Ethiopia are heading to join the fight” (Afar Forum, 2018). Afar Forum warns that if the Ethiopian government fails to intervene, “the region will be destabilized and could be a cause for further escalation of the conflict which submerges the Horn of Africa region” (Afar Forum, 2018). It is worth noting that Afars are present in three countries in the Horn of Africa - Djibouti, Eritrea and Ethiopia. The same can be said of Somalis, in Djibouti, Ethiopia and Somalia.

4.3 Livelihood insecurity could strengthen non-state armed groups

By undermining livelihood security, climate impacts have the potential to further destabilise Ethiopia. This would contribute to the growth of ethnic militias and other NSAGs - and have repercussions for the whole region.

Climate vulnerability in temperature and rain will have deep impacts on agricultural production and livelihoods tied to the sector. “Agricultural systems are almost exclusively rain-fed” (Gelaw, 2017, p.4). According to the Ethiopian Central Statistical Agency, about 95% of agricultural production comes from smallholder farmers (CSA, 2018). For instance, grain crops account for the majority of overall agricultural production and 62% of private smallholder farmers’ agricultural production in 2017/18 (CSA, 2018). They are crucial to household income as “cereal production is mostly for subsistence, with any excess sold to cater for other household needs such as education and healthcare” (Gelaw, 2017). In the short term, failing to produce enough to meet this demand would negatively impact the livelihood security of small-scale farming households.

Livestock can represent an additional source of conflict, as is the case between the Afars and Issa-Somalis (Hundie, 2010). Although livestock raiding is traditionally a cultural phenomenon, nowadays the raiders seem to be doing it in part to earn income by selling the animals in open markets (Hundie, 2010, p.142). Communities dependent on pasture and livestock are especially vulnerable to climate variations, and they may be forced to find alternative sources of livelihoods, including through joining militias.

A recent report on the links between climate change and insurgency, “Insurgency, Terrorism and Organized Crime in a Warming Climate”, postulates that there are two major ways in which climate change can facilitate the rise and growth of NSAGs. The first is by contributing to a state’s instability, thus creating a safe haven for the proliferation and operation of such groups; the second is by contributing to livelihood insecurity, which furnishes these groups with more potential recruits (Nett and Rüttinger, 2016). In different regions around the globe, there are suggestions that the impacts of drought on livelihoods have contributed to the increase in recruitment, whether in the case of Al-Shabaab in Somalia (Maystadt & Ecker, 2014), the Islamic State in Iraq (Schwartzstein, 2017) or Boko Haram in the Lake Chad basin (Vivekananda et al., 2019). The case of the Taliban in Afghanistan shows that a lack of agricultural jobs in a country where agriculture is the backbone of the rural economy can exacerbate conflict by providing more recruits for NSAGs (Blakemore, 2009).

Both mechanisms for facilitating NSAG growth are a problem in Ethiopia. Climate change undermines rural livelihoods, and increased livelihood insecurity can cause economic despair, which exacerbates existing conflicts. For example, Ethiopian rural communities often sell livestock in order to deal with erratic rainfall and drought (WFP, 2014). However, this coping mechanism sometimes fails. With their options for making a living restricted, Ethiopians, especially unemployed youth, may find joining ethnic militias and other NSAGs more attractive.

This is a particularly conceivable scenario in the Oromia, SNNP and Somalia regions, where liberation fronts such as the Oromo Liberation Front (OLF), Sidama National Liberation Front and Ogaden National Liberation Front (ONLF) have typically had a presence. The OLF and ONLF recently disarmed and signed agreements (according to some reports) with the ruling authorities, but only time will tell if those arrangements lead to permanent state of peace and stability - the requests of those ethnic-based Liberation Fronts will also have to be addressed in practice. Somalia, which shares a border and ethnic ties with Ethiopia, will continue to be a latent threat considering the presence of Al-Shabaab in the country. Meanwhile, the question of “ownership” of the capital city, Addis Ababa, is one of the most difficult ones to address. The SNNP region is currently facing instability due to the Sidama ethnic group’s request for self-administration, to which the federal government has yet to issue a reasonable response. There is a real danger of unemployed and dissatisfied citizens joining the NSAGs - indeed, it is probably already happening.

NSAGs outside of Ethiopia can also exploit the fragile situation to further their goals. Interesting, Al-Shabaab has included Afaan Oromo in their list of languages for propaganda (Warner and Weiss, 2017). A recent analysis by a local news source, Addis Maleda, looked at how the current fragility within Ethiopia (a key Western security ally) will benefit Al-Shabaab: Ethiopia is pulling its troops from border areas towards the centre to address internal security issues and its capacity to protect itself from attacks is declining, or at least is perceived to be declining, while the fact that Somalis and the Ethiopian Somalis of the Somalia region share an ethnic identity gives Al-Shabaab easy access (Addis Maleda, 2019). Although further study is needed for a more comprehensive understanding, peace and security analysts agree that Al-Shabaab’ infiltration through Ethiopia’s Somalia region and the country’s weakening security capability poses a concern (Addis Maleda, 2019). Al-Shabaab follows the same Islamist ideology as Al-Qaeda and had pledged alliance to the group many times; additionally, it has links with other extremists such as Boko Haram, Al Qaeda of the Maghreb and the extremist group in Tanzania (Shay, 2018).

5 REGIONAL AND GLOBAL DIMENSIONS

The climate projections for the Greater Horn of Africa essentially mirror those of Ethiopia. Although a general consensus on the projected changes in precipitation patterns is lacking so far, there is agreement that the long-term climatic condition of the region will be hotter and drier with more frequent extreme events (Ministry of Foreign Affairs of Netherlands, 2018). The impacts of climate variability and change - both known and uncertain - will be felt differently by individual countries. However, because these countries are economically and socially linked to one another, climate vulnerability impacts in one country will quickly affect neighbouring countries if climate-sensitive conflict prevention is not implemented in a timely fashion - as the case of Ethiopia shows.

Another important aspect to consider is the effect of global-level climate mitigation policies on Ethiopia’s internal stability. For instance, large-scale land investments aimed at supporting a transition to clean energy and improved food security can lead to an exacerbation of tensions between local communities and authorities. Global warming and rising oil prices, for example, have turned attention to biofuels as an alternative to fossil fuels. In an attempt to tap into this opportunity, in 2006 Ethiopia’s government put together a biofuel strategy identifying land that was most favourable to biofuel production, so it could be leased to both private and state investors (Shete and Rutten, 2014).

As a report points out, “[w]hen interest in biofuels started, Ethiopia saw that domestic, foreign and state investors were keen to acquire land for biofuel production” (Shette and Rutten, 2014, p.138). This caused large displacement, which has created tensions between local state and federal governments (ECC Factbook, n.d.) - even though many of these investors have since exited Ethiopia’s biofuel sector due to disappointing harvests and a decline in the overall popularity of biofuel production. In short, conflict sensitivity is

important for not only local adaptation efforts, but also for managing the effects of climate change impacts externally, e.g. in the framework of global energy transition efforts.

6 POLICY CONTEXT AND CURRENT ACTIVITIES

The response to climate change is systematically incorporated into Ethiopia's economic and development ambitions in the Climate-Resilient Green Economy (CRGE) initiative. The CRGE outlines Ethiopia's goal of becoming a middle income country in 2025 through green economic development (Environment, Forest and Climate Change Commission, n.d.). Another important statement on the government's position on climate change is made in the Ethiopian Program of Adaptation to Climate Change (EPACC), which replaced the Ethiopia National Adaptation Plan of Action in 2010 (Ministry of Foreign Affairs of the Netherlands, 2018). This marked a move away from project-based adaptation policies towards mainstreaming the adaptation structure at the government, sectoral, and local levels (Echverria and Terton, 2016). Of the eleven administrative regions (nine states and two special administrative regions), eight have put together state-level climate adaption plans (Echverria and Terton, 2016). However, these efforts tend to remain in the realm of government agencies with a mandate over the economy and the environment, and they have not been incorporated into more strategic security considerations.

Currently, the two major adaptation and resilience programmes in regards to agriculture and food security are the Productive Safety Net Programme (PSNP) and Sustainable Land Management. The PSNP, which began in 2005, provides cash or food to vulnerable populations with the goal of improving their livelihoods and thus increasing resilience to shocks (Hobson and Campbell, 2012). It is notable that Ethiopia's NAP identifies the agricultural sector as a priority area. In fact, among the 18 adaptation options proposed by the NAP, two propose addressing the climate vulnerability risks on agriculture and livestock directly. They suggest doing so by enhancing food security through improving agricultural productivity in a climate-smart manner, and by strengthening drought, livestock and crop insurance mechanisms.



7 ENTRY POINTS FOR ADDRESSING CLIMATE-FRAGILITY RISKS

So far, Ethiopia's climate change vulnerability has primarily been examined from an economic development lens, with the end goal of a climate-resilient economy. However, decision-makers have paid little attention to the crucial issue of vulnerabilities at the community level that can exacerbate tensions. A focus on climate and security is equally important. In view of current stability challenges, such policies are crucial for preventing the convergence of climate vulnerability risks with existing tensions. The Government of Ethiopia and its partners should focus on preventing these scenarios from unfolding. Four important entry points to this end are:

7.1 Implement climate change adaptation solutions that are conflict sensitive

In order to prevent livelihood insecurity from exacerbating existing tensions, it is essential to successfully implement climate change adaptation policies that take into account social, ethnic and political dynamics. The agricultural sector has been identified as a priority for climate change adaptation; two of the 18 adaptation options focus on food security and drought, livestock and crop insurance mechanisms. The Government of Ethiopia is already prioritising the implementation of solutions in these areas. However, it is important that these are conceived and implemented in a conflict-sensitive way that pays sufficient attention to the combination of existing tensions. For example, specific efforts must be taken to ensure that adaptation solutions in the agricultural sector do not create inequalities or exacerbate existing grievances between farmers and pastoralists.

7.2 Scale up opportunities for peacebuilding to support climate resilience

There is evidence that small-scale peacebuilding processes focusing on the promotion of dialogue and mediation between pastoralist groups in southern Ethiopia facilitated cooperation and enabled these groups to better cope with harsh drought conditions. Hence, there is a need to provide disaster risk reduction and climate change adaptation policies and programmes in Ethiopia and other countries in the Horn of Africa with dedicated resources for conflict management. Specifically, there is untapped potential for peacebuilding programmes that focus on helping mitigate the effects of severe drought among pastoralists and on speeding up recovery after droughts. By extension, there is also a need for better monitoring of how such programmes can serve as an effective part of climate resilience and disaster risk reduction efforts, reducing the need for large-scale humanitarian relief during periods of severe drought (Mercy Corps, 2012). Funding agencies, the government and civil society stakeholders will all have key roles in driving this.

7.3 Integrate climate change into strategic planning aimed at mitigating conflict risk

Current and future security strategies in Ethiopia should consider how climate variability and change exacerbate conflict risks. The resulting insights should then be used to inform development programming with a view to strengthening resilience - e.g. by facilitating livelihood diversification and strengthening conflict management mechanisms.

7.4 Promote regional-scale climate security cooperation

In order to contain the potential spread of tensions and conflict due to adverse impacts of climate variability and change, the countries of the region will have to cooperate. Regional organisations such as the Intergovernmental Authority on Development (IGAD) can facilitate the design and implementation of programmes and are a good platform for bringing those concerns to the table. At the moment, IGAD has a strong focus on climate vulnerability - for example, it promotes dialogues and does capacity-building on the topics of environmental

security and drought resistance. There is scope to expand this focus to encompass conflict management and peacebuilding with the inclusion and support of governments, as well as bilateral and international development partners and civil society.

8 CONCLUSION

This briefing has highlighted the ways in which the impacts of climate variability and change could exacerbate instability and conflict in Ethiopia. Climate change, by resulting in increased desertification, drought and flooding, will have a negative impact on livestock, farmland and nutrition. As many still depend on rain-fed agricultural and pastoral activities, this can reduce employment opportunities in the agricultural sector and increase migration and competition over increasingly scarce natural resources. Combined with existing inequalities and the skewed distribution of resources, these situations can contribute to existing tensions, also along ethnic lines, particularly if local and state institutions lack the capacity to address them.

These compound climate-fragility risks threaten Ethiopia's impressive achievements in terms of economic growth and poverty reduction. They also pose risks to the stability of the Horn of Africa region, whose instability would have global repercussions because of migratory movements and weakened state authority - NSAGs would potentially be able to expand their influence in the area.

If policymakers want to mitigate the challenges posed by worsening security concerns, they must come up with a concerted and comprehensive response through conflict-sensitive adaptation policies, scale up opportunities for peacebuilding to support climate resilience, integrate climate risk and vulnerability analysis into security strategies at different levels, and improve cooperation on climate security at the regional level.

REFERENCES

- Adegehe, A.K. (2009). *Federalism and ethnic conflict in Ethiopia: a comparative study of the Somali and Benishangul-Gumuz regions*. *Inter-regional Conflicts: Somali Region* (pp. 180-212). (Doctoral Thesis). Leiden University. Leiden, Netherlands.
- Afar Forum Press Release. (2018, December 30). Retrieved from <https://www.satenaw.com/afar-forum-press-release/>
- African Migration and Development Center. (Policy brief, 2016, January 01). Rural-Urban Migration and Poverty in Ethiopia. Retrieved from <https://www.africaportal.org/publications/rural-urban-migration-and-poverty-in-ethiopia>
- Alemayehu, A. (2019) *Why should Ethiopians care about urbanization? Jobs, infrastructure, and formal land and housing*. World Bank Blogs. Retrieved from <https://blogs.worldbank.org/african/why-should-ethiopians-care-about-urbanization-jobs-infrastructure-and-formal-land-and-housing>
- Argaw, B. (2017) Regional inequality of economic outcomes and opportunities in Ethiopia. WIDER Working Paper 2017/118. Helsinki: UNU-WIDER. Retrieved from <https://www.wider.unu.edu/sites/default/files/wp2017-118.pdf>
- Bahalla, N. (2019, July 25). Act now to avert disaster in drought-hit East Africa, aid agencies say. *Reuters* (Thomas Reuters Foundation). Retrieved from <http://news.trust.org/item/20190725163136-o3xzv>
- Barbelet, V., Hagen-Zanker, J., Ludi, E., Carver, F., te Velde, D. W. (2018). To ensure Ethiopia's 'jobs compact' works for refugees. ODI. Retrieved from <https://www.odi.org/blogs/10716-how-ensure-ethiopia-s-jobs-compact-works-refugees>
- Blakemore, B. (2009, October 9). Taliban, al Qaeda Helped by Warming. *ABC News*. Retrieved from <https://abcnews.go.com/Technology/JustOneThing/taliban-al-qaeda-helped-global-warming-us-intel/story?id=8786346>
- Barter, D. (2019). Committed or Complacent: A Failing Response to the 2019 Horn of Africa Drought Crisis. *OXFAM*. Retrieved from <https://42kgab3z3i7s3rm1xf48rq44-wpengine.netdna-ssl.com/wp-content/uploads/2019/07/HoA-CommittedOrComplacent-July-2019.pdf>
- Caniglia, M. (2018). *Ethiopia: Recent turmoil in the Somali State region risks to jeopardize the security and political situation as ethnic tensions spread across the country*. European Strategic Intelligence and Security Center. Retrieved from <http://www.esisc.org/publications/briefings/ethiopia-recent-turmoil-in-the-somali-state-region-risks-to-jeopardize-the-security-and-political-situation-as-ethnic-tensions-spread-across-the-country>.
- Dahir, A. L. (2018, August 6). Ethiopia's new premier is now facing his first major domestic challenge. *Quartz Africa*. Retrieved from <https://qz.com/africa/1349015/violence-and-looting-as-ethiopia-troops-enter-somali-ogaden-region/>.
- ECC (Environment Conflict and Cooperation) Factbook (2019). Disputes over the Grand Ethiopian Renaissance Dam (GERD). Retrieved from <https://factbook.ecc-platform.org/conflicts/eastern-nile-basin-dispute-over-millennium-dam-ethiopia>
- ECC (Environment Conflict and Cooperation) Factbook (n.d.). Land Grabbing and Protests in Ethiopia. Retrieved from <https://factbook.ecc-platform.org/conflicts/land-grabbing-ethiopia>
- Echeverria, D. and Terton, A. (2016) Review of Current and Planned Adaptation Action in Ethiopia. CARIIA Working Paper #8. Retrieved from <https://idl-bnc-idrc.dspacedirect.org/bitstream/handle/10625/55864/IDL-55864.pdf?sequence=1&isAllowed=y>
- Environment, Forest and Climate Change Commission. (n.d). Climate Resilient Green Economy (CRGE) Strategy. Retrieved from <http://mefcc.gov.et/environment/climate-resilient-green-economy-crge-strategy/>
- Ethiopia's Climate Resilient Green Economy. (2019). PART II: NATIONAL ADAPTATION PLAN OF ETHIOPIA (NAP-ETH).
- Ethiopian Government Portal (2019) Government Structure. Retrieved from <http://www.ethiopia.gov.et/government-structure>

- Ethiopian Panel on Climate Change (2015). First Assessment Report, Working Group I Physical Science Basis. Addis Ababa: Ethiopian Academy of Sciences.
- Ethiopia PM Hailemariam Desalegn in surprise resignation.* (2018, February 15) *BBC* Retrieved from <https://www.bbc.com/news/world-africa-43073285>
- FDRE (Federal Democratic Republic of Ethiopia) (2011). Climate-Resilient Green Economy Vision. Addis Ababa, Ethiopia: Federal Democratic Republic of Ethiopia.
- Federal Democratic Republic of Ethiopia Central Statistical Agency (2018). Key Findings of the 2017/2018 (2010 E.C.) Agricultural Sample Surveys. Retrieved from <http://www.csa.gov.et/ehioinfo-internal?download=915:key-findings-of-the-2017-2018-agricultural-sample-surveys&start=15>
- Federal Democratic Republic of Ethiopia Central Statistical Agency (2019). Key Findings On The 2018 Urban Employment Unemployment Survey. Retrieved from <http://www.csa.gov.et/ehioinfo-internal?download=921:key-findings-2018-ueus&start=15>
- FEWS NET (Famine Early Warning Systems Network) (2019). Humanitarian food assistance needs to be higher than normal through September. Retrieved from <http://fews.net/east-africa>
- Gardner, T. (2017, December 4). 'Addis has run out of space': Ethiopia's radical redesign. *The Guardian*. Retrieved from <https://www.theguardian.com/cities/2017/dec/04/addis-ababa-ethiopia-redesign-housing-project>
- Gebreluel, G. (2014). Ethiopia's Grand Renaissance Dam: Ending Africa's Oldest Geopolitical Rivalry?. *The Washington Quarterly*, Vol. 37 (2), pp. 25-37. Retrieved from <https://www.tandfonline.com/doi/abs/10.1080/0163660X.2014.926207?journalCode=rwaq20>
- Gedamu, Y. (2019). Abiy's year one: Ethiopia faces the threat of ethnic conflict. *Al Jazeera*. Retrieved from <https://www.aljazeera.com/indepth/opinion/abiy-year-ethiopia-faces-threat-ethnic-conflict-190401081955303.html>
- Gelaw, M.A. (2017). Climate-Smart Agriculture in Ethiopia. Feed the Future. Retrieved from https://www.researchgate.net/publication/324498319_Climate_Smart_Agriculture_in_Ethiopia_Climate_Smart_Agriculture_Country_Profiles_for_Africa_Series
- Government of Sweden. (2018). Greater Horn of Africa Climate Risk and Food Security Atlas Technical Summary. Retrieved from <https://reliefweb.int/report/world/greater-horn-africa-climate-risk-and-food-security-atlas>
- Hobson, M. and Campbell, L. (2012) How Ethiopia's Productive Safety Net Programme (PSNP) is responding to the current humanitarian crisis in the Horn. Humanitarian Practice Network. Retrieved from <https://odihpn.org/magazine/how-ethiopia%C2%92s-productive-safety-net-programme-psnp-is-responding-to-the-current-humanitarian-crisis-in-the-horn/>
- Hundie, B. (2010). Conflicts between Afar Pastoralists and their Neighbors: Triggers and Motivations. *International Journal of Conflict and Violence*, Vol. 4 (1) 2010, pp. 134 - 148
- Internal Displacement Monitoring Centre (IDMC) (2018). Internal Displacement in 2018: Mid-Year Figures. Retrieved from <https://reliefweb.int/sites/reliefweb.int/files/resources/201809-mid-year-figures.pdf>
- International Crisis Group (2019) *Managing Ethiopia's Unsettled Transition* (Report No 269). Brussels, Belgium: International Crisis Group
- Key Findings on The 2018 Urban Employment Unemployment Survey. (2018) Central Statistical Agency Retrieved from <http://www.csa.gov.et/component/phocadownload/category/362-ueues-2018>
- Kosec, K. et al. (2017). The Effect of Land Access on Youth Employment and Migration Decisions: Evidence from Rural Ethiopia. *American Journal of Agricultural Economics*, Vol. 100 (3), 931-954. Retrieved from <https://academic.oup.com/ajae/article/100/3/931/4781351>
- Labzaé, M. (2019). Benishangul conflict spurred by investment, land titling, rumors. *Ethiopia Insight*. Retrieved from <https://www.ethiopia-insight.com/2019/03/08/benishangul-conflict-spurred-by-investment-land-titling-rumors/>

- Mamdani, Mahmood. (2019, January 3) The Trouble With Ethiopia's Ethnic Federalism. *The New York Times*. Retrieved from https://www.nytimes.com/2019/01/03/opinion/ethiopia-abiy-ahmed-reforms-ethnic-conflict-ethnic-federalism.html?rref=collection%2Ftimestopic%2FEthiopia&action=click&contentCollection=world®ion=stream&module=stream_unit&version=latest&contentPlacement=12&pgtype=collection
- McSweeney, C.; New, M. & Lizzano, G. (2006). UNDP Climate Change Country Profiles: Ethiopia. United Nations Development Programme. Retrieved from <https://digital.library.unt.edu/ark:/67531/metadc226682/>
- McSweeney, C.; New, M. & Lizzano, G. (2012) UNDP Climate Change Country Profiles Retrieved from https://www.geog.ox.ac.uk/research/climate/projects/undp-cp/UNDP_reports/Ethiopia/Ethiopia.hires.report.pdf
- Mercy Corps (2012). *From Conflict to Coping: Evidence from Southern Ethiopia on the contributions of peacebuilding to drought resilience among pastoralist groups*. Retrieved from <https://reliefweb.int/report/ethiopia/conflict-coping-evidence-southern-ethiopia-contributions-peacebuilding-drought>
- Maystadt, J. & Ecker, O. (2014) Extreme Weather and Civil War: Does Drought Fuel Conflict in Somalia through Livestock Price Shocks? *American Journal of Agricultural Economics*, 96, (4:1), 1157-1182. <https://doi.org/10.1093/ajae/aau010>
- Ministry of Foreign Affairs of the Netherlands. (2018). Climate Change Profile: Ethiopia. Retrieved from <https://reliefweb.int/report/ethiopia/climate-change-profile-ethiopia>
- Ministry of Foreign Affairs of the Netherlands. (2018). Climate Change Profile: Greater Horn of Africa. Retrieved from <https://www.government.nl/documents/publications/2019/02/05/climate-change-profiles>
- Mulugeta, E. (2019, August 5) Ye Al-Shabaab Manserarat Ena Ye Ethiopia Ye Dehinet Sigat. Addis Maleda. Retrieved from <https://www.addismaleda.net/archives/5830>
- Nett, K. & Rüttinger, L. (2016). *Insurgency, Terrorism and Organized Crime in a Warming Climate*. Climate Diplomacy Berlin: Adelphi.
- OCHA (2018). *More than 70,000 people displaced from Benishangul Gumuz region*. Retrieved from https://reliefweb.int/sites/reliefweb.int/files/resources/humanitarian_bulletin-17-30_september_2018_final.pdf
- OLF rebels in Ethiopia give up arms: Oromo officials. (n.d.) *africanews* Retrieved from: <https://www.africanews.com/2019/02/16/olf-rebels-in-ethiopia-have-given-up-arms-oromo-officials/>
- Perez, Ines. (2013, March 4) Climate Change and Rising Food Prices Heightened Arab Spring. *Scientific American/Climate Wire*. Retrieved from <https://www.scientificamerican.com/article/climate-change-and-rising-food-prices-heightened-arab-spring/>
- ReliefWeb (2019). UNICEF Horn of Africa Drought Situation as of May 31, 2019. Retrieved from <https://reliefweb.int/report/ethiopia/unicef-horn-africa-drought-situation-may-31-2019>
- Schwartzstein, P. (2017, November 14). Climate Change and Water Woes Drove ISIS Recruiting in Iraq. *National Geographic*. Retrieved from <https://news.nationalgeographic.com/2017/11/climate-change-drought-drove-isis-terrorist-recruiting-iraq/>
- Shay, S. (2018). The Islamic terror threat to the Horn of Africa. *IPS Publications: Institute for Policy and Strategy*. Retrieved from https://www.idc.ac.il/he/research/ips/Documents/publication/2/Shaul_Shay11_03_18.pdf
- Shete, M. and Rutten, M. (2014). Biofuel Feedstock Production in Ethiopia. A. A., W. K., S. S. and D. F. (Ed.), *Digging Deeper: Inside Africa's Agricultural, Food and Nutrition Dynamics* (pp. 135-156). Lieden, Boston: Knoniklijke.
- Solomon, S. (2017, September 29) What's Driving Clashes Between Ethiopia's Somali, Oromia Regions? *VOA*. Retrieved from <https://www.voanews.com/africa/whats-driving-clashes-between-ethiopias-somali-oromia-regions>
- Sonneveld, B.G.J. et al. (2017). Identifying Hot Spots of Critical Forage Supply in Dryland Nomadic Pastoralist Areas: A Case Study for the Afar Region, Ethiopia. *Land*, 6 (82) pp. 1-31.

- Teshome, B. (2014). Ethiopia Poverty Assessment. World Bank Group. Retrieved from <https://www.worldbank.org/en/topic/poverty/publication/ethiopia-poverty-assessment>
- Shadow falls over Ethiopia reforms as warnings of crisis go unheeded. (2019, March 14). *The Guardian*. Retrieved from <https://www.theguardian.com/global-development/2019/mar/14/shadow-falls-over-ethiopia-reforms-warnings-of-crisis-ignored-abiy-ahmed>
- United Nations Development Programme. (2018) Human Development Indices and Indicators: 2018 Statistical Update: Ethiopia. Retrieved from <http://hdr.undp.org/en/content/human-development-indices-indicators-2018-statistical-update>
- United Nations World Food Program. (2014) Climate risk and food security in Ethiopia: Analysis of climate impacts on food security and livelihoods. Retrieved from https://documents.wfp.org/stellent/groups/public/documents/newsroom/wfp269379.pdf?_ga=2.81880790.1327794269.1553041272-353777886.1553041272
- United States Agency for International Development (2016) Climate Change Risk Profile: Ethiopia.
- Vaughan, S. (2015) Federalism, Revolutionary Democracy and The Developmental State, 1991-2012. Prunier, G. and Ficquet, E. Understanding Contemporary Ethiopia: Monarchy, Revolution and the Legacy of Meles Zenawi (pp.283-311). London: Hurst & Company.
- Vivekananda, J., Wall, M., Sylvestre, F., & Nagarajan, C. (2019) Shoring Up Stability. Addressing Climate and Fragility Risks in the Lake Chad region. Berlin: adelphi.
- Warner, J. & Weiss, C. (2017) A Legitimate Challenger? Assessing the Rivalry between al-Shabaab and the Islamic State in Somalia. *CTCSENTINEL*, 10 (10).
- What is behind clashes in Ethiopia's Oromia and Somali regions? (2017) *BBC* Retrieved from <https://www.bbc.com/news/world-africa-41278618>
- Wilson, T. (2019, May 30). Ethnic violence in Ethiopia has forced nearly 3 million people from their homes. *LA Times*. Retrieved from <https://www.latimes.com/world/la-fg-ethiopia-ethnic-violence-millions-displaced-20190530-story.html>
- World Bank Group. (2015) Ethiopia Poverty Assessment 2014. Washington, DC. © World Bank. Retrieved from <https://openknowledge.worldbank.org/handle/10986/21323> (accessed 3 September 2019)
- World Bank Group (2016) Empowering Ethiopia's Pastoral and Agro-pastoral Communities. Retrieved from <http://www.worldbank.org/en/news/feature/2016/10/11/empowering-ethiopias-pastoral-and-agro-pastoral-communities>
- World Bank Group (2019a) Employment in agriculture (% of total employment (modeled ILO estimate)). Retrieved from <https://data.worldbank.org/indicator/SL.AGR.EMPL.ZS> (accessed 28 July 2019)
- World Bank Group. (2019b). Overview. Retrieved from <https://www.worldbank.org/en/country/ethiopia/overview> (accessed 2 October 2019)
- World Bank Group (2019c) *Seventh Ethiopia Economic Update : Special Topic : Poverty and Household Welfare in Ethiopia, 2011-2016 (English)*. Washington, D.C. : World Bank Group. <http://documents.worldbank.org/curated/en/432421554200542956/Special-Topic-Poverty-and-Household-Welfare-in-Ethiopia-2011-2016>
- World Bank (n.d.). 4.2 World Development Indicators: Structure of output Retrieved from <http://wdi.worldbank.org/table/4.2#> (accessed 28 July 2019)