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Land, climate change and internal migration among the Wolayta youth of southwest Ethiopia

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Executive summary

In Ethiopia, internal migration of youth from rural to urban centres is a significant and growing phenomenon. Rapid urbanisation, greater investment in cities and the lack of opportunities in rural areas for farm and off-farm employment are some of the primary reasons behind the growing migration of young people from rural to urban areas. A range of issues related to rural poverty and lack of opportunities influences internal migration. This study investigates the combined impact of land scarcity and fragmentation, and climate change on the high incidence of migration of youth from the Wolayta Zone in Ethiopia's Southern Nations, Nationalities and Peoples Region.

Wolayta youth's migration to urban or peri-urban areas of Ethiopia is driven by a range of socioeconomic and environmental factors. Land poverty and exclusionary governance, fragmentation, a lack of off-farm opportunities and climate change have converged to create a situation where young people have little choice but to move to urban areas to eke out a living. Creating and sustaining youth livelihoods remains an urgent issue of concern in Wolayta as in other parts of rural Ethiopia. The present study uses the Humbo Assisted Natural Regeneration Project – a collaboration between the Government of Ethiopia and development partners – to illustrate how external interventions in resource-poor and ecologically degraded areas can be opportunities not only for combatting climate change but also for creating climate-friendly, income-generating livelihoods. Such projects can, thus, provide options for diversified livelihoods strategies for young people that avoid the need for distress migration or displacement.

Key findings and recommendations

1. A primary issue in the Wolayta Zone is land inheritance, scarcity and fragmentation, which has a critical impact on young people's ability to create and sustain livelihoods.

This is particularly acute for young women, who tend to be disempowered by and neglected in customary land governance systems.

- *Facilitating or improving access to land rental, as an alternative to inherited land, must be explored further. An important step in this direction would be to advocate the relaxing of current restrictions on the maximum number of years land can be rented.*[1]

2. Climate change and ecological degradation exacerbate land fragmentation and scarcity by lowering crop quantities and quality, and negatively affecting food security.

Young people are especially vulnerable in communities facing climate change and land poverty in rural Ethiopia – driving them to choose internal migration as a coping mechanism or adaptation strategy. Simultaneously, combatting climate change presents an opportunity to create viable options for communities through the creation and promotion of green jobs and skills.

- *Community considerations must be at the forefront of projects addressing climate change. Concerted and meaningful collaboration with community members in developing shared goals is central to the success of such projects. A targeted focus on young people and women is also*

[1] See Bezu and Holden (2014b).

recommended, so that their livelihood needs and opportunities are embedded in large-scale green economy projects from the start.

3. The search for work is a primary reason for young people's outmigration to urban areas.

The dearth of off-farm work options for Wolayta youth creates a high incidence of outmigration compared to other areas of Ethiopia. Whereas initiatives such as the Humbo Project hold the potential to transform rural areas both ecologically and economically, such efforts appear to have inadequately incorporated young people's current concerns and aspirations for the future.

- *Projects must take into consideration skills development requirements and fair compensation policies when designing activities, particularly those that involve youth who are at a socio-culturally consequential stage of their lives. Projects should promote off-farm livelihoods and associated skills that are tailored to local contexts. These could include entrepreneurial/vocational training, green job creation and access to credit.*

4. Most national and global climate change mitigation policies overlook the connection between environmental factors and impacts on migration.

Priority tends to be given to issues concerning international migration and forced displacement, whereas internal migration receives considerably less attention. Moreover, Ethiopia has lacked a clear internal migration policy that is systematically linked with other socioeconomic policies.

- *Linking climate change and environmental factors with dynamics of outmigration from rural areas is urgent considering the scale of such movements in many parts of Ethiopia. The Climate Resilient Green Economy (CRGE) strategy must, therefore, make greater efforts to embed young people's livelihoods and wellbeing in the strategy. Poverty alleviation initiatives must, likewise, acknowledge and incorporate the linkages between climate change, land governance and youth outmigration.*

1 Introduction

In Ethiopia, internal migration patterns are dominated by the movement of rural youths towards urban centres. This rapid review focuses on the relationship between land governance, climate change and internal migration. It centres the analysis on the case of the Wolayta people of the Southern Nations, Nationalities and People's Region (SNNPR) in Ethiopia, where rates of internal migration among young people are high, and where large-scale programmes to implement Ethiopia's 'Green Economy' approach have been carried out in recent years. The main question this review aims to address is how the local governance regime, coupled with the long-term adverse effects of climate change, is influencing youth mobility among the Wolayta in light of Ethiopia's ambitious Climate Resilient Green Economy (CRGE) strategy.

In considering this question, the study seeks to shed light on a number of critical factors that determine the nature and characteristics of internal migration. These include:

- the traditional land governance systems among the Wolayta and how these influence the vulnerability and resilience of smallholder farmers;
- the ways in which climatic changes and weather variabilities shape internal migration;
- the implications of large-scale climate change mitigation initiatives for internal migration dynamics;
- the trade-offs between climate change mitigation approaches and community development.

In exploring these issues, the study asks: to what extent do national policies support young people's ambitions either to migrate or stay by untapping their potential in their places of origin and destination? It advocates embedding internal migration within the national development strategy and policy process that deal with climate change mitigation. The key policy findings and recommendations are aimed at contributing towards making the internal migration of young people a 'demographic dividend', rather than a liability, enhancing Ethiopia's internal migration policy and identifying some missing links with respect to its goal of building a low-carbon society by 2025.

The analysis consists of six interlinked sections. The next section outlines the approach and methodology, including a background and rationale for selecting Wolayta as an area of focus. Section 3 critically explores the inter-linkages between climate, land and migration in Ethiopia and within the wider literature. Section 4 explores the dynamics and pathways of internal migration among the Wolayta. Section 5 illustrates these arguments in relation to a specific case study, the Humbo Assisted Natural Regeneration Project – a carbon finance-based climate change mitigation and community development initiative – while section 6 analyses the strengths and limitations of existing policy interventions relating to climate mitigation and internal migration. The final section provides a set of recommendations for policy and programmes based on the findings from the preceding sections.

2 Approach and methodology

The study addresses the following questions:

- What are the factors that determine the nature and characteristics of internal migration?
- What are the traditional land governance systems among the Wolayta and how might these influence the vulnerabilities of smallholder farmers?
- How have climatic changes and weather variabilities been shaping internal migration among the Wolayta?
- What large-scale climate change mitigation interventions, including carbon finance programmes, have been carried out and what are their implications for the internal migration dynamics of the Wolayta?
- What policy lessons can be drawn for internal migration in Ethiopia?

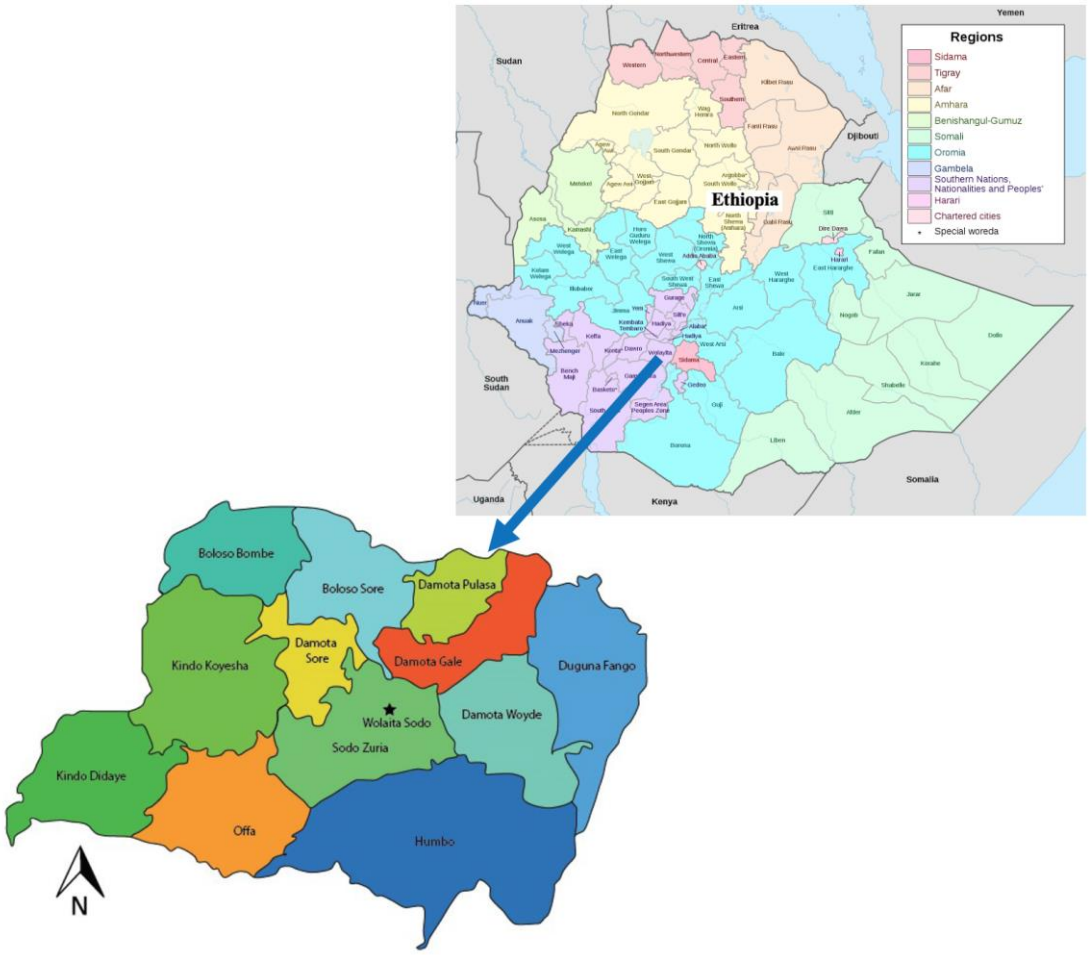
The study draws on telephone interviews conducted during 2020 and 2021 with 20 young Wolayta internal migrants between the ages of 15 and 29,[2] 50% of whom were female respondents. Interviewees were selected randomly; however, their varied migration experiences, livelihood profiles, and gender were used in distilling the final sample selection. The migrants were interviewed in Sodo, Awassa, Adama and Addis Ababa. Travel restrictions associated with Covid-19 prohibited face-to-face interviews. The interview work was supplemented by a review of relevant literature and policy documents on internal migration dynamics in Ethiopia, including national labour statistics and previous surveys on the Wolayta. Telephone interviews and the literature review were further complemented by prior fieldwork conducted by the author in seven villages of the Humbo district of the Wolayta Zone in Ethiopia during 2017. The fieldwork was conducted to review the impact of the Humbo Assisted Natural Regeneration Project, the first large-scale, certified emissions reduction forestry initiative in Africa.

Located about 300 kilometres south of Addis Ababa, Wolayta borders the zones of Gamo Gofa and Borena (south), Dawro (west), Kembata Tembaro (northwest), Hadiya (north) and Sidama (east) – see Figure 1. The Wolayta have a population of some two million (CSA, 2019), the majority of whom speak Wolayta (an Omotic language). Poverty rates are high, and most Wolayta derive their livelihood from *enset*-based subsistence agriculture,[3] as well as cultivation of maize, sweet potato, cereals, sorghum, teff, cassava and coffee. For the most part, the Wolayta are a relatively homogeneous society with a shared history, culture, language, religion and livelihoods. Historically, the people were governed by the Kingdom of Wolayta, which was independent of the northern Abyssinian empire (Donham, 1994) until being dismantled and incorporated into the imperial power of Ethiopia in the 1890s (Abbink, 2006). Local memory of the Kingdom shapes identity formation, and there have been efforts by the Wolayta to secure regional-state status (distinct from SNNPR), on the basis that they have a distinct identity in Ethiopia.

[2] The youth age range is based on Ethiopia's National Youth Policy 2004 (FDRE, 2004).

[3] *Enset*, also known as false banana/pseudo-banana, is the major starch staple of the southwest Ethiopian Highlands, enhancing the food security of more than 20 million people in the country (Olango et al, 2014; see also Rahmato, 1995).

Figure 1: Administrative map of the Wolayta Zone



Sources: *Dunnavant (2017) and NordNordWest (2021).*

One of the reasons for selecting Wolayta as a case study for this research is that the Zone has seen high levels of internal rural–urban migration over the past two decades, with many migrants moving to nearby Hawassa, Adama and Addis Ababa. Interestingly, and in contrast to many other ethnic groups, the Wolayta tend to engage in internal rather than international migration. A second reason for selecting Wolayta is that it is the site of the first United Nations Framework Convention on Climate Change (UNFCCC)-certified forestry-based large-scale carbon sequestration initiative in Africa. It was also the forestry site of Ethiopia's first carbon finance programme, developed under the CRGE initiative launched in 2011.

3 Background to climate change, land governance and internal migration

In conjunction with wider socioeconomic and political factors, the impacts of climate change increase the vulnerability of communities by reducing their resilience to shocks. This can contribute to the decision to migrate. In the early 1990s, the Intergovernmental Panel on Climate Change (IPCC) (1992) predicted that climate change would lead to the displacement of millions globally as a result of shoreline erosion, coastal flooding and severe drought. Such climate change effects and environmental degradation can undermine local livelihoods, forcing young people to abandon the rural areas in which they were brought up. Brown (2008) distinguishes between 'climate processes' (sea-level rise, desertification and growing water scarcity) and 'climate events' (flooding, storms and glacial lake outburst floods). That said, much remains unknown and scientists have not reached a consensus on future climate impacts, making it difficult to predict their effect on migration.

In this context, defining environmentally induced migration has often proved to be difficult and contentious. Climatic effects are closely correlated to socioeconomic policy and institutional arrangements, which come together to drive migration. In other words, climatic factors are not the sole driving force behind migration and displacement. Rather, it is the compounded effects of multiple interrelated factors that intensify migration. In the case of Ethiopia, these include local resource governance, access to land and other productive assets, demographic changes, young people's aspirations and unemployment. What is more, the figures of millions of people projected to move in response to future climate change effects have been branded 'alarmist' by some sceptics (for example, Piguet et al, 2011), who argue that such findings are heavily dependent on assumptions and models that lack consistency.[4]

With this in mind, this study expands from a singular focus on climate to also consider the impact of changing land tenure and land use arrangements. The availability of land, together with changing soil fertility, may influence the level and intensity of migration for those who depend on land-based livelihoods (see Bundervoet, 2018). Ethiopia's land tenure system influences land fragmentation and ownership (see Section 3.1. for more details). Moreover, population density and high birth rates at the point of origin affect the size of land holdings and contribute to mobility. Beyond this, there are issues of governance – at both the village level and that of the state bureaucratic machinery, with a politically charged relationship between the state and local institutions. These dynamics relate to questions of identity, patterns of inequality and food insecurity.

While most migration scholars have focused on international migration processes, this study shines a light on internal movements. Internal migration carried out in response to conflict, drought and in search of economic opportunities is well documented in Ethiopia (Bundervoet, 2018; Etana et al, 2020). Additional contributing factors include population growth, the overall political economy, unequal access to resources and centre–periphery tensions. A large part of this migration occurs

[4] The most frequently cited figure predicts that by 2050 there could be as many as 200 million environmental refugees (Myers, 2002).

from rural to urban areas. Internal mobility is dynamic, in that it can be triggered by multiple, intertwined factors and it can have demographic, socioeconomic, political, environmental and climate change impacts in either or both rural and urban areas.

Historically, the growth of cities and urbanisation has served as a centre of gravity for rural youth, and this has been the case with the recent upward trend of urban growth in Africa. In Ethiopia, there has been rapid urbanisation over the past three decades, with the urban population expected to increase from 13.5 million in 2010 to 32 million in 2030 (FDRE, 2011). The capital Addis Ababa has expanded greatly, and its estimated population has increased by about three million since 1990, reaching 4.4 million in 2020 (UNDESA, 2018). This urbanisation has required migrant labour for construction, for a range of manual and semi-skilled work, and for small- and large-scale manufacturing. As a political and economic hub, Addis Ababa's population has grown substantially over the past few decades, with 37% of the inhabitants reporting having been born outside the city (Moller, 2012). These urban areas offer the biggest labour markets and have become an attractive destination for Wolayta migrants.

Over the past decade, Ethiopia has experienced robust economic growth, accompanied by positive poverty reduction trends. However, 23% of its population still lives in extreme poverty and inequalities are prevalent (World Bank, 2020). Despite the unequal impacts of economic growth, these dynamics have created fertile ground for young people to migrate. Much of this movement has, as Pankhurst et al (2013) argue, resulted from the exhaustion of the existing rural informal safety net of risk mitigation and resilience.

Young people, often under- or uneducated, tend to constitute the demographic group most likely to migrate in search of livelihoods, to improve their financial wellbeing and support their resource-poor families in the countryside. Addis Ababa accounts for roughly 40% of this migration, followed by Adama, Bahir Dar and Hawassa (see Bundervoet, 2018). Generally, the jobs taken up by internal migrants are in the informal sector, or are 'unskilled' jobs not favoured by the established urban labour force (Erulkar et al, 2006). Internal migration is also a highly gendered process, and gender may determine the distance to destination points, the type of jobs taken up, the sector in which people engage, the level of wages paid and the migrants' prospects (see Amera et al, 2006; Gray & Mueller, 2012).

4 Internal migration dynamics among the Wolayta

The Wolayta are among the ethnic groups in Ethiopia that have dominated internal migration over the past two decades (Assefa & Ysmaw, 2019; Kassa, 2017). Wolayta move in large numbers to the nearby cities of Hawassa as well as to Adama and Addis Ababa (a distance of 300 to 400 kms). Based on studies conducted among three communities in Wolayta, Cochrane and Vercillo (2019:284) found youth migration to be a "common experience, with one quarter to one half of all households having at least one migrant". According to the Central Statistical Agency of Ethiopia's (CSA) national survey of those who recently migrated to the cities in the five years preceding 2013, those originating from Wolayta constituted 22% of the population in Hawassa (SNNPR), 3% in Adama (Oromia Region), 2% in Addis Ababa, 0.27% in Dire Dawa, and 2% in other urban areas (CSA, 2014).

Wolayta are not known for international migration, in contrast to the many Ethiopians who undertake difficult journeys, crossing the Sahara Desert and the Mediterranean Sea to reach Europe, or heading south towards South Africa. Such migration decisions, according to the young Wolayta interviewed for this study, entail multiple factors, including the availability of financial resources, adequate levels of information and social networks. When asked why they did not pursue international migration, one 29-year old man said that his lack of interest in engaging in it was "because many people have suffered due to suffocation in containers in lorries to get into South Africa". A 20-year old man who started his internal migration journey at the age of 14 added: "I wish I could go overseas, particularly [to] the USA. But this requires a lot of financial resources which I cannot afford. That is why I dropped entertaining that idea." Despite this reticence to engage in international migration, among the 20 interviewees, young Wolayta men showed relatively more interest in international migration than their female counterparts[5].

Most of the young Wolayta interviewed emphasised their interest in staying in the Zone if viable livelihoods options were available to them. However, land scarcity, consecutive severe droughts, and socioeconomic and environmental unpredictability have contributed to a decline in agricultural yields and productivity. This has increased vulnerabilities and jeopardised livelihoods, leading many Wolayta youth to see migration as a viable livelihood adaptation strategy and their best option. Internal migration can increase access to new skills and wider markets and provide an avenue for remitting to their families. In this context, the exodus of youth from rural Wolayta continues to increase. One young migrant worker said that the Sodo Zuria District of Wolayta had been supporting young people with micro-finance, as an unemployment mitigation approach, but the demand was far greater than the available support. He underscored the fact that many young people cannot access loans, as they fail to secure collateral, or else have to form groups in order to do so.

[5] A number of respondents were asked about migration to the Kingdom of Saudi Arabia (KSA), but they mentioned that the majority of young people who migrate to KSA or the Gulf are mainly from the Oromia, Amhara (South Wollo) and Tigray regions. Although a few young Wolayta use this route, there are other ethnic groups such as Kambaata who are considered to dominate the number of international migrants from the SNNPR.

Wolayta migrants face institutional and policy obstacles in urban destination areas as they are required to have an 'urban registration card' that proves their formal registration with the municipalities. Not having this card can restrict their access to formal employment opportunities and local and municipal services, including subsidised food, micro-credits and job creation initiatives (Pankhurst et al, 2013). In order to have this card, they are required to transfer their residence to their destination (or obtain a letter from their place of origin). Men take up various types of unskilled jobs while the majority of the female migrants engage in domestic work and hospitality.

Based on the data collected for this study in 2020–21 and in 2017, internal migration-related opportunities and challenges for young Wolayta can be summarised as shown in Table 1.

Table 1: Internal migration related opportunities and challenges for young Wolayta

Internal migration-related opportunities	Internal migration-related challenges
• Better job opportunities than in Wolayta, despite the lack of agencies that link the young with jobs at destinations. • Ability to acquire diversified skills and job experience by working mainly in construction, hospitality, petty trade and vending. • Increased incomes through remittances (improving agricultural productivity and access to social services). • Ability to accumulate start-up capital and invest it in micro-businesses like buying and selling motorcycles. • Increased land size and productive assets for siblings who remain at home. • Easing of ecological pressures in areas of origin.	• Problems of peer influence and expectation–reality checks at destination. • Lack of initial settlement support and high monthly rent payments (homelessness or being forced to sleep rough in churches). • Requirement of resident identification card to access formal jobs and credit services. • Coping with a new culture and language barriers. • Ethnic conflict at destination and lack of safety and protection from the local authorities. • Difficulty of finding jobs immediately, low wages and unsafe working environments. • Lack of safety net (mini-insurance) in case of asset loss or occurrence of a pandemic like Covid-19. • Dehumanisation, suffering insults or bullying.

Young people interviewed for this study were asked whether they preferred short-term or long-term migration within Ethiopia. Their answers revealed distinct motivations for these different kinds of migrations. Those who preferred short-term migration mainly reported that they had moved away to engage in seasonal agricultural harvesting or to work on sugar plantations and in the construction sector. Interviewees emphasised that long-term migration is mainly linked to the availability of land, whereby being landless increases the likelihood that they will seek longer-term migration. Wolayta migrants interviewed for this study stated that the lack of employment opportunities, scarcity of land, land fragmentation and poor soil fertility, as well as climate variability, were key drivers of outmigration.

Given the scale of young Wolayta's outmigration, internal migration has been part of the household livelihood resilience strategy against drought and other socio-economic problems. The young Wolayta interviewed in 2020/21 have expressed the positive contribution of their engagement with internal migration and its impact on diversifying the household income and livelihoods. As per their explanations, despite the challenges they face at destinations and the recent COVID-19 associated

adverse socio-economic impacts, they see outmigration as the best option for accessing wider labour market opportunities, reducing food insecurities and supporting their families in Wolayta through remittances and in-kind support (most of them support their families and relatives three to four times a year and those who cannot do it regularly at least provide some of form of assistance during the annual festive of *Meskel*). Accordingly, as per the interviewed young people and the focus group discussions, internal migration as a coping mechanism to nature and human-made shocks is thought to be functioning among the Wolayta at least in gaining new skills and supplementing household income.

4.1 Land tenure and governance

Lland tenure (or the control of land tenure regimes) has been a key element in advancing the political agenda of the successive imperial (up to 1974), socialist (1974–91) and 'developmental state' (1991–present) governments in Ethiopia, with significant impacts on livelihoods, identity and power. Depending on the political and economic philosophy of different governments, the land governance regime has changed several times. For instance, the feudal and semi-feudal agrarian system was abolished by the socialist-led *Derg* regime, which promulgated the Land Reform Proclamation No 31 of 1975 that nationalised land and introduced a "revolutionary agricultural development" model (Adhana, 1991:188). This was followed by the introduction of villagisation, resettlement programmes and state-farms. However, these reforms did not achieve their intended objectives, but rather "succeeded only in creating social and economic upheaval" (Devereux, 2000, p 12) and "havoc among the peasants" (Adhana, 1991:188). The post-1991 Ethiopian People's Revolutionary Democratic Front (EPRDF) government retained the existing state policy on land, but protected peasants' inheritance rights (Allen, 1993). The private ownership of rural lands was rejected outright by the government on the grounds that, if land were privatised, it might "force peasants to sell their land out of distress" and lead them to landlessness and an exodus to urban areas (Pankhurst et al, 2013). In terms of age groups, youth are among those with the least access to land. According to computed 2017 CSA data, of the 15–29 age group only 4.2% have access to land. This compares to 46% for the 30–64 age group and 93% for those above 64 years old (Wossen & Ayele, 2018).

Land governance and redistribution in Wolayta has partially emulated national policies and practices. Following the 1975 land reform, landlordism was abolished (Chinigò, 2015) and land became accessible to all peasants, including those who were at the lower level of the social stratification as well as "newcomers to the villages - those without hereditary lines or former slaves" (Tsegay, 2020:182) and had not previously held it (see Abbnik, 2006; Aalen, 2011). However, the reform did not abolish traditional landholdings – that is, the "partible inheritance" system (Rahmato, 2007:8), where adult children inherit their ancestors' land holdings. This practice, compounded by demographic pressure and high fertility rates, leaves young people with a disproportionately small parcel of land, or renders them landless altogether.[6] Rahmato calls these Wolayta peasants "micro-holders" (2007:10), and notes that they constitute two-thirds of peasant households (1995). With the land reforms, although landlessness "virtually disappeared" (Adhana, 1991:186), households' average landholdings have been small – less than 0.7 hectares, compared to the national average of 0.96 hectares (Cochrane & Vercillo, 2019:283). Besides the difference in agro-ecological zones, soil fertility, farming systems, means of production, the type of crops and rainfall variability, to meet subsistence needs in Ethiopia 'the estimated average farm size of 2.5–3.5 hectares [is] needed" (Paul & wa Gĩthĩnji, 2018:765; see also Rahmato, 2008:138). However, household land size in Wolayta has

[6] In some areas, Wolayta Zone's population density reaches 664 people per km^2 and its population has more than doubled since the 1970s, reaching two million in 2019 (Abbink, 2006; Rahmato, 2007; CSA, 2019). The area also has one of the highest fertility rates in the country: 6.9 live births per woman compared to the national rate of 2.9, according to the 2007 census (CSA, 2017b).

been diminishing, and traditional agrarian structures are preventing the young from being able to access local productive assets and resources. In some communities, land may be so scarce that it can only be accessed after marriage or through patrimonial inheritance. For many young people who have few to no employment opportunities *in situ* and minimal access to land, outmigration emerges as a key strategy.

Land governance is also highly gendered, in particular relating to resource and inheritance practices that are embedded in traditional values and customs. Young Ethiopian women have less agricultural land and productive assets. They make up only 3% of all landholders (Bezu & Holden, 2014a; CSA, 2012), despite the fact that laws provide for equal land acquisition rights for males and females. The average female-headed household owns only 0.63 hectares of cultivated land, compared to an average of 1.17 hectares for male-headed households (CSA, 2017a). This relative lack of resources, and lower social status, pushes young Wolayta women to look at internal migration as providing the only available livelihood options, as suggested by the key respondents of this study. Some young Wolayta men expect to inherit land eventually, which discourages their long-term migration (Rahmato, 2007); however, this does not appear to be the case for young women.

4.2 Local economy and employability

Local economic viability within national economic dynamics has a strong influence on the mobility of youth. Despite some progress in the formal federal-regional governments' power and resource sharing arrangements, there has been a continuous marginalisation of the minority groups within the ethno-federal political system in Ethiopia (Barata, 2012; Lavers, 2018) and could not bring considerable "economic advancement or local service delivery" (Vaughan and Mesfin, 2020:8). This affects budget allocation and power sharing between the central government and the regional states within the system. Wolayta is among the least urbanised areas in Ethiopia (about 8% compared to the national rate of 16%) and this affects Wolayta's "economic growth, agricultural commercialisation, employment and poverty reduction" (Rahmato, 2007:3).

In this context, Wolayta Zone's overall local economic outlook is poor, with the majority of the population depending on subsistence agriculture. Non-farm rural enterprises are limited. Sodo town, the administrative centre of the zone, has seen some investments and job creation over the past two decades. However, these have fallen far short of absorbing the local supply of labour (see Kassa, 2017). For instance, Lewi Hotels and Resorts Ethiopia built a US$4.5 million resort in 2017, which was expected to create 250 jobs (Solomon, 2017), not enough to significantly engage the high number of young people who migrate to Sodo, mainly from the rural areas of Wolayta. As one interviewee from Sodo said, "So far the options do not seem promising – despite some construction works, large scale investment that can accommodate more young people does not exist. Private investors are mainly limited to the construction of service provisions like hotels." In general, the adaptive capacity of the local economy in Wolayta Zone remains low (see Stapleton et al, 2017).

4.3 Climate change, environmental degradation and agricultural productivity

In Ethiopia, climate change, rainfall variability and environmental degradation have increased pressure on already dwindling natural resources and on farmers whose livelihoods depend on "low-input, low-output rainfed agriculture" (Devereux, 2000). In southern Ethiopia, climatic impacts have created "immense pressure on environmental resources" (Rahmato, 2007:8) causing deforestation, the depletion of soil nutrients and soil erosion (Eyasu, 2000; Mota et al, 2019). In this context, Wolayta is one of the most flood-prone and highest 'landslide risk' areas in Ethiopia (FDRE, 2018). Drought is also common, and communities' vulnerability has been documented over the decades

(see Rahmato, 2007; Pankhurst et al, 2013). The Wolayta Zone is also subject to slow onset disasters caused by desertification, loss of biodiversity, land and forest degradation, salinisation and rising temperatures (see UNFCCC, 2016). This has made Wolayta frequently susceptible to both floods and drought. In the face of these recurring disasters, communities' coping mechanisms and risk-sharing networks have been continuously challenged (Tsegay, 2017).

As well as contributing to internal migration, environmental factors also contribute to food insecurity. Recent studies conducted in rural areas of Wolayta have revealed that the majority of rural households (71%) are food-insecure, and unable to meet daily food consumption needs (Mota et al, 2019). With the aim of improving agricultural productivity in Wolayta, governments and development partners have undertaken a number of measures. The World Bank, for instance, supported the Wolayta Agricultural Development Unit (WADU) programme that was active from 1972 to 1983. Despite an increase in crop production, it was phased out as a result of the withdrawal of fertiliser subsidies, which proved too costly. In 1995, Sasakawa Global 2000 was introduced in order to support Wolayta farmers with mineral fertiliser and hybrid seeds. However, it also proved financially unviable, leaving farmers with debts and heavy financial burdens (Eyasu, 2000).

5 Case study: Humbo Assisted Natural Regeneration Project

Ethiopia's grand ambition to become an emerging green economy of the Global South has long been evident, even before the launch of the CRGE strategy in 2011 (FDRE, 2011). CRGE was developed under the premiership of Meles Zenawi, who believed that the Global South should play a more central role in the global climate change regime. CRGE brings both adaptation and mitigation approaches together, and was intended to serve as an overarching policy blueprint for Ethiopia's ambition of becoming a carbon-neutral middle-income country by 2025. The strategy focused on agriculture, health, water and energy, and buildings and transport; it aimed to reduce agricultural dependence and shift the economy towards industry and the service sectors. CRGE signalled a departure from the business-as-usual 'brown economy',[7] by investing in hydropower, environmental rehabilitation and modern technologies in order to achieve near-zero net emissions in 2030 – making Ethiopia "one of the early adapters" (Fisher, 2013).

In spite of this, the ways in which efforts to build a green economy may affect migration and mobility have been overlooked by the CRGE and also by other national strategies, such as Ethiopia's Growth and Transformation Plan (GTP). This is surprising, given the far-reaching impacts that the CRGE is expected to have on the Ethiopian economy. Internal migration is only referenced in passing in the CRGE – in the context of increasing urbanisation and as a contributor to waste production, energy consumption and carbon emissions (FDRE, 2011). In addition, the CRGE does not acknowledge the more positive impacts of internal migration associated with labour markets and economic contributions.

With this gap in mind, this section of the paper seeks to unpack and better understand what the strategy means for migration – with a particular focus on the internal migration of Wolayta youth. It shines a light on the specific case study of the Humbo Assisted Natural Regeneration Project – a forest ecosystem restoration initiative that sits within the wider CRGE. In doing so, the paper explores what impacts this particular intervention, with its focus on climate mitigation and land governance, has had on the internal migration dynamics of young people in Wolayta.

5.1 Background to the Humbo Assisted Natural Regeneration Project

The Humbo Assisted Natural Regeneration Project is a carbon finance-based project that aims to promote afforestation and reforestation.[8] It was included as part of the Kyoto Protocol's Clean Development Mechanism (CDM). The initiative covers 2,728 hectares of land and is governed by seven forestry cooperatives (comprising 5,168 members) in the Humbo District of the Wolayta Zone (see Figure 2).[9] The project was initiated by World Vision Ethiopia/World Vision Australia in

[7] A brown economy is one in which economic growth is largely dependent on environmentally destructive forms of activity, especially fossil fuels like coal, oil and gas.

[8] Afforestation is the establishment of a forest or stand of trees (forestation) in an area where there was no previous tree cover. Reforestation is the natural or intentional restocking of existing forests and woodlands that have been depleted.

[9] The seven forestry cooperatives are: Abala Gefeta, Abala Longenna, Abala Shoya, Bola Wanche, Bossa Wanche, Hobicha Bada and Hobicha Bongota (Humbo Agroforestry Union, 2017).

partnership with the World Bank and the Government of Ethiopia, and takes a community-based approach to land restoration – in this case, the rehabilitation of the Humbo Mountain, which was mostly barren land. Despite initially rejecting the project because of concerns over land ownership and acquisition, the Humbo communities eventually agreed to accept it following a concerted campaign of engagement and information dissemination. The project's main activities include:[10]

- Community management of public land with multiple objectives of promoting natural resource management, poverty alleviation and biodiversity enhancement.
- Development of a model of community land use that would enhance greenhouse gas removal by regenerating native vegetation, which can be replicated in other regions of Ethiopia.
- Formation of seven community cooperative societies, securing legal title to manage the proposed regeneration area, and adopting a constitution and bylaws to manage the project.
- Establishment of an institutional structure for users to manage the project, while also having rights to the land and produce from the land.
- Establishment of a system to monitor the carbon stocks, report on changes in them and help the smallholder agricultural community access carbon revenue to improve their livelihoods.
- Establishment of a financial system to manage investments in the community.
- Establishment of a system to monitor the environmental and social issues relevant to the project.
- Reduction of flooding and soil erosion affecting the downstream farmers and improving the productivity of their land through the restoration of degraded forests.

Deploying a carbon finance model, Humbo's fixed crediting period began in 2006 and is expected to last until 2036, with the aim of sequestering over 863,183 tonnes of carbon dioxide equivalent (tCO_2e) (PDD , 2018).[11] Within this model, Humbo farmers were expected to restore the barren mountain, capture atmospheric carbon and receive compensation for their contributions to afforestation and reforestation. The carbon credits were purchased by the World Bank's BioCarbon Fund (BioCF), which was created to assist in the development of a market for forestry-based carbon. The Humbo initiative has been a highlight of the greening experiment – a centrepiece of the forestry and carbon finance model in Ethiopia.[12] Notwithstanding its relatively modest scale, the Humbo initiative has contributed positively towards Ethiopia's green diplomacy, as key informant interviews with public servants confirmed. The CRGE strategy uses Humbo as an example of best practice in forestry-related efforts. Here, the Humbo case study is discussed in relation to young people's internal migration dynamics.

5.2 Environmental and socioeconomic impacts of the Humbo Project

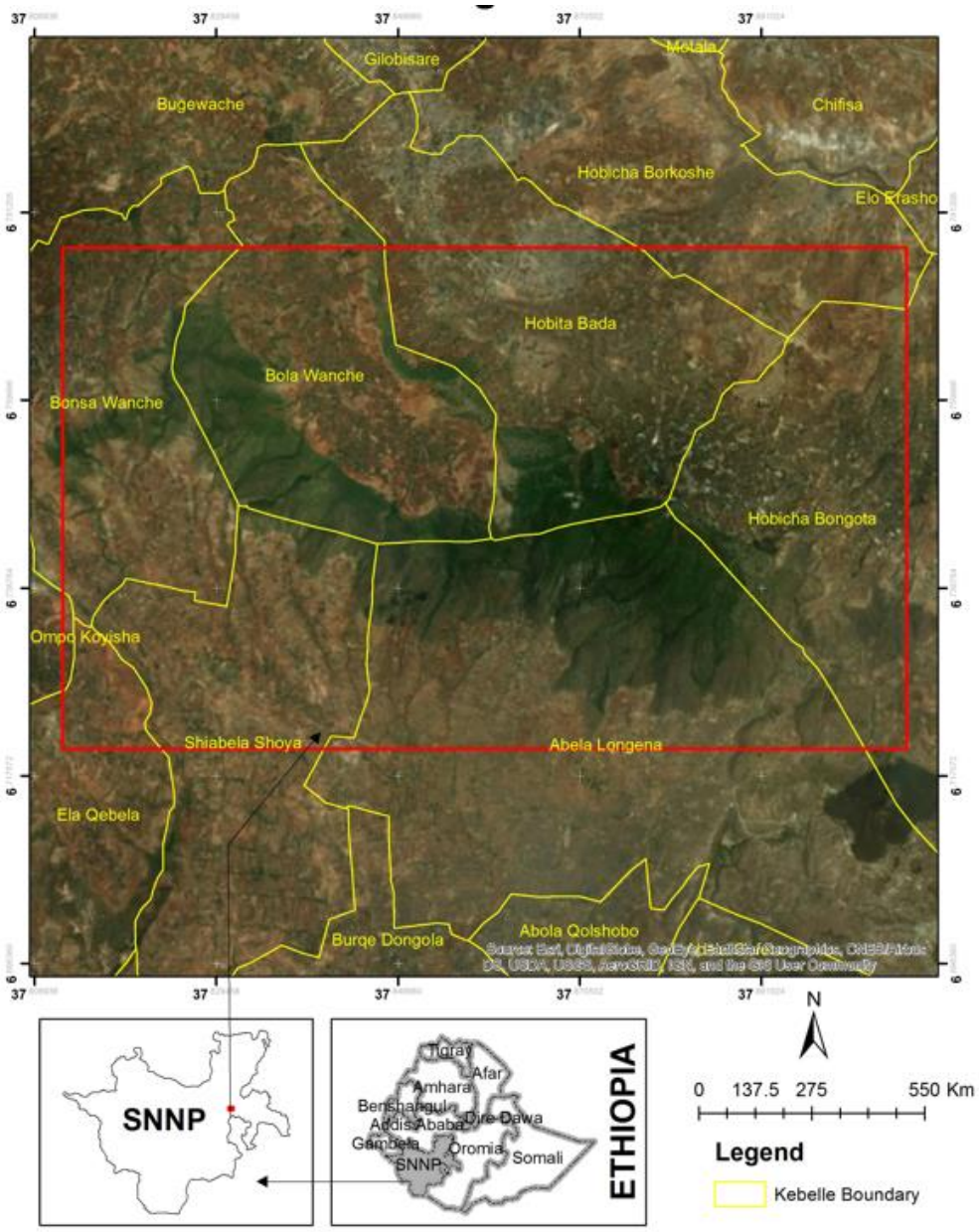
The CDM, as a carbon market mechanism, was designed to meet the dual goals of emissions reduction and sustainable development, although in practice these have emerged as trade-offs (Hultman et al, 2020). As confirmed by many of the farmers and experts that the author interviewed during extended fieldwork in 2017, the Humbo Project's main success has been the physical regeneration of 2,728 hectares of barren mountain land. This has helped to reduce soil erosion and flooding, and has improved the microclimate and water streams (Tsegay, 2020). Farmers have also benefited from the ability to harvest grass seasonally from the forest, as well as a regulated tree harvest (Ibid). In contrast to these environmental benefits, the Humbo initiative has brought limited direct financial benefits to the communities, and the wider livelihood improvement impacts remain

[10] See Biryawaho et al (2012).
[11] CO_2e is used to describe different greenhouse gases like methane (CH_4), nitrous oxide (N_2O) and ozone in a common unit and show their equivalent global warming impact (Brander & Davis, 2012).
[12] In 2009 the former prime minister, Meles Zenawi, even made a presentation on Humbo at the Copenhagen Summit (COP15), in order to showcase Ethiopia's commitment to climate mitigation.

to be seen. As a Bola Wanche farmer said:

> *"Despite the positive contribution of the project in restoring the mountain, there is no unique contribution or livelihood-targeted support that has improved our living situation".*

Figure 2: The Humbo regenerated area



Source: Map credit Zubairul Islam (Tsegay, 2020).

The carbon revenue redistribution mechanism uses a communal approach, whereby payments are reinvested in communal works instead of being paid directly to individuals. The total carbon revenue for ten years is estimated at $726,000, which would amount to negligible individual payments ($12 per year) once divided between the 5,168 cooperative members (and after deducting the 15% emergency reserve and administrative cost). Consequently, the benefits of the carbon credit fund go to the seven cooperatives in the area and are reinvested in communal assets. As of 2017, this had enabled the building of eight grain mills, 11 grain stores and two shops. While these results should

not be discounted, they are not significant. They suggest that, overall, the Humbo scheme has failed to fairly compensate farmers for their contributions, and for the wider non-carbon benefits (Tsegay, 2020). This would suggest that the project has had little impact on the economic or livelihood factors driving young peoples' decision to migrate out of Humbo.

In terms of financial inflows to the Humbo communities, the carbon off-set approach does not appear to have been viable thus far. What is more, there has been a high degree of financial uncertainty, as the World Bank withdrew as a carbon credit buyer and the farmers do not know what will happen to carbon credit sales over the next 20 years,[13] particularly with the continuous decline in carbon prices per tonne (Tsegay, 2020). Within such uncertainty, the Ethiopian government has approved the deregistration of the Humbo initiative from the CDM, registering it instead in the Voluntary Carbon Market (VCM) as of 14 April 2020 (UNFCCC, 2021).[14] Whereas under the compliance market of the CDM carbon sales were guaranteed at a unit price of $4/tCO$_2$e, under the VCM the Humbo cooperatives need to search for a carbon credit buyer in the competitive global voluntary carbon markets. For rural cooperatives – especially given their limited capacities and low negotiation skills – the VCM might pose its own challenges – although it may give them a higher unit rate per tCO$_2$e.

While the immediate socioeconomic impacts remain uncertain and, for the most part, unimpressive, there are expectations of longer-term gains. As one farmer from Abala Shoya said, "I received no monetary benefit since the completion of the project, but I do expect among other things in the future to have a dividend from carbon money, support in income generating activities, credit facilities with low interest rates and low-cost grains". Cooperatives give a loan of $20 to some cooperative members – although the impact is limited, as this does not provide sufficient capital for economic activities. The recent distribution of mini-solar panels on a loan basis is, however, having a positive impact on household energy security, enabling recipients to light their homes and charge mobile phones. Nevertheless, as overall household incomes and livelihoods have not changed much, if at all, as a result of the Humbo project, its impacts on youth decision making when it comes to rural–urban outmigration were always likely to be minimal. The Humbo initiative and its watershed management has rehabilitated degraded soils through conservation, erosion and flood control measures, water retention capacity and afforestation/reforestation. This holds a potential to improve soil fertility and smallholder livelihoods, but it will take years to realise its full impact on internal migration.

5.3 Job creation

Creating labour-intensive, low-carbon jobs is one of the co-benefits of promoting afforestation and reforestation. Hence, a key ambition of the Humbo initiative was the creation of jobs for rural communities. Project reports indicate that young Wolayta have been able to participate in employment opportunities during and after the project delivery periods (PDD, 2009, 2018). However, as research by the author in 2017 shows, many of these jobs were temporary, and the number of people employed is relatively small. There were 9,000 one-off daily labourer jobs for cooperative members – with every member having at least three days of training and on average

[13] Following the withdrawal of Canada in 2012, as well as Spain, Italy, France, Luxembourg and Japan as trustees of the BioCarbon Fund and financial contributors in 2019, and with the lack of an alternative framework within the post-Kyoto protocol and Paris Climate Agreement for the CDM projects, the World Bank was forced to withdraw from the Humbo as a carbon credit buyer on 30 June 2019 (UNFCCC, 2021; World Bank, 2021). The COP26 climate talks in Glasgow in November 2021 are expected to address some of the CDM drawbacks, and to decide on its fate and legacies.

[14] To access the Humbo CDM deregistration document see Link.

three to 30 days of work in levelling plantation land, at seedling centres and in planting. More than 100 temporary jobs were also created during the construction of communal assets for the seven cooperatives. Moreover, 56 relatively regular jobs have been created in the running of local communal businesses, including grain stores and the shop (as operators, assistants, shop keepers and in seasonal jobs of loading and offloading grain sacks), and as forest guards hired to protect the mountain from illegal logging. A minority of young people can also access two-week jobs as part of annual tree pruning and forest maintenance, for which they receive $0.60 per day (Tsegay, 2020).

However, the micro-investments in the villages have been unable to accommodate a large number of young Wolayta, because of low carbon credit revenues ($ 4 per tCO_2e), and lack of a capital fund and of large-scale socioeconomic interventions. In addition, those who are hired have been consistently demanding a pay rise. However, their demands have not been responded to positively by the cooperative leaders, as the carbon revenue they get from the World Bank is low. Most of those cooperative members recruited into the communal businesses assume they are discharging their societal responsibilities through their jobs; for instance, the forest guards consider the salary too low and feel only partly satisfied that their benevolent communal contribution is sustaining the conserved forest area. This factor has been key in deterring young people from engaging in the initiative; instead, they prefer to migrate. Respondents estimated that between 50% and 60% of local people had migrated out of the Humbo villages, contributing to a generalised labour deficit among smallholder families.

In order to capitalise on the opportunities and address the obstacles migrants and would-be migrants face, policy makers must develop the necessary policies and institutional structures required to support young people's decisions either to stay in their villages, or to make safe journeys to and develop their lives and livelihoods in destination areas. For instance, a young Wolayta who migrated from Sodo, first to Hawassa and then to Addis Ababa, emphasised the importance of having some skills before starting the migration journey. He said, "When I was in Sodo I was trained in construction at the Sodo Polytechnic College and was able to gain experience. Then I was able to use my networks and now I became a building development sub-contractor in Addis Ababa."

5.4 Inclusion of youth and women

As well as creating jobs, the Humbo initiative set out to widen the inclusion of marginalised groups. If the green economy approach is to work, the goal of inclusivity should be equally weighted alongside ecological regeneration and mitigation of carbon emissions (Cameron, 2012). Within the Humbo initiative, the participation of women (and particularly young women) has been low. At the start of the project in 2006, women comprised 10% of all participants, rising to only 25% after a decade of implementation. There were several reasons for this low level of participation (Tsegay, 2020). Some male respondents perceived women as being less capable of understanding climate change issues and lacking awareness about and involvement in forestry. Physically demanding and labour-intensive jobs associated with the project were also perceived as being more suitable for men. However, female respondents mentioned their lack of free time as a constraint on participation, as they are typically tied up with domestic work. Another obstacle to female participation was a general preoccupation of the World Vision Ethiopia staff members with project delivery, especially the CDM's technical aspects, which pushed gender-sensitivity down the list of priorities.

Similarly, levels of youth participation in the Humbo project have remained relatively low (Tsegay, 2020). Participants in focus group discussions (FGDs) held in 2017 identified a number of explanations for this. First, many youth were studying in school when the afforestation/reforestation aspects of the initiative were carried out. Second, some were deterred by the need to pay an annual membership subscription fee of $2. Third, the fact that members did not derive direct financial

benefits from working on the scheme disincentivised youth from participating. Fourth, cooperative membership composition was aimed mainly at male heads of households. Finally, many youth are looking for other kinds of jobs – including white collar jobs and jobs that provide daily cash. This was articulated by a young FGD respondent:

> Those who are in education want to get office jobs and others want jobs that can generate an income quickly like providing motorcycle transportation services between the villages and nearby towns and '*ayer-be-ayer* trades' [petty trade]. It is only those who dropped out of education and decided to permanently settle in the village and depend on their livelihoods in farming who became members of the cooperative.

As mentioned above, most of the young from Humbo have opted to move out of the area and chosen to migrate, instead of taking part in the initiative. However, when asked what opportunities the Humbo project would present for them, young people articulated a range of potential benefits. These included: job opportunities, loans, petty trade, access to irrigated land and training, and opportunities to become carbon credit experts. For instance, the young Humbo people could gain skills in measuring the sequestered carbon stock annually. Given that there are only a few carbon-related interventions in Ethiopia, their skills and expertise could potentially be in demand in other parts of the country – including leading nature-based solutions to climate change with an adaptive internal migration process.

In sum, while the Humbo initiative has delivered forest regeneration and environmental rehabilitation, progress on poverty reduction, inclusiveness and job creation has shown limited impact. Projects like the Humbo initiative, which combine land-based solutions and ecological approaches, can potentially create new opportunities for young people. However, tailored schemes and fair financial compensation is needed for young people to remain motivated and engaged as custodians of their local environment. Beyond the locality, Humbo has implications for the CRGE policy and internal migration, as discussed below.

5.5 Discussion: linking the CRGE and internal migration

The CRGE initiative brings both climate change adaptation and mitigation approaches together and is intended to serve as an overarching blueprint for Ethiopia's ambition of becoming a carbon-neutral middle-income country. Its central aim is to mitigate climate change, create jobs for communities and reduce poverty. CRGE considers the carbon finance model as a pillar in generating green funds, by "protecting and re-establishing forests for their economic and ecosystem services, including as carbon stocks" (FDRE, 2011). The underlying assumption is that Ethiopia could offset about 320 million tCO_2e a year, thereby generating up to $6.4 billion (EPA-FDRE, 2011). Its forestry and carbon finance development are expected to benefit from bilateral agreements such as Norway's $80 million fund signed in 2017 (NICFI, 2021). This is an emerging trend that could hugely affect young peoples' mobility in rural Ethiopia, either through the measures related to land acquisition or by creating economic opportunities at local or destination areas.

Nature-based solutions are believed to have a role in reducing global greenhouse gas emissions cost-effectively (McAfee, 2012). However, in the case of the Humbo initiative, carbon financing schemes did not support young people's aspiration to realise their potential. Carbon pricing is determined by global market forces beyond their control and the amount of money injected back in to local Humbo communities has remained small (Tsegay, 2020). Indeed, leaving the entire carbon credit pricing mechanism to markets does not guarantee that young people will have access to jobs or opportunities at their localities. Viewed from this perspective, the global carbon emissions reduction and trading mechanism should develop an alternative, tailored approach that enables young people to be environmental stewards of their communities while also accessing decent jobs and sustaining

their livelihoods. Such an approach could include skills, and financial and livelihood opportunities for communities.

Beyond its scale and magnitude, it has been documented that the Humbo initiative has made a significant impact on land governance, ecological rehabilitation and climate diplomacy of Ethiopia while experimenting with market-based approaches to climate change and poverty reduction (Tsegay, 2020). Despite its cost-benefit viability challenges (as per the project officer, the financial institutions and banks in Ethiopia had declined to offer any loans to the Humbo initiative expressing their concerns on its feasibility), its effectiveness is visible in its contribution to the significant improvement of the local resource capacity and its governability. The lessons drawn also lend support to the initiative's success in that programme components such as community mobilisation, land governance and user rights are partly being adopted by other similar interventions in the country such as the Jamma-Urji Farmer Managed Forestry in the Oromia Region (HoA-REC&N, 2016).

When it comes to internal migration, the CRGE should scope and clarify the key issues. It should also develop a multi-sector youth-oriented policy that broadens inclusion for women and young people. This should unpack youth's potential role in each sector (agriculture, forestry, energy, etc), as well as clarifying what each sector can bring to them. Should young people decide to move elsewhere, the policy should include provisions that prepare them for moving and align them with new green job opportunities elsewhere. At present, however, initiatives like the CRGE do not address displacement, migration and mobility. This is a missed opportunity. Internal migration should be seen within the wider agenda of the green economy, aiming to create opportunities for young people and build resilient livelihoods systems. With this in mind, interventions that target global climate change mitigation or environmental restoration should be developed in conjunction with economic development programmes.

6 Policy interventions and internal migration in Ethiopia

As outlined in the case of the CRGE and the Humbo Project, most national and global climate mitigation policies overlook the connection to, and impacts on, migration. And, when they do discuss migration as an impact, they tend to be limited to international migration and forced displacement (including the Marrakesh, Warsaw Mechanism and Paris Climate Agreements). Internal migration gets much less attention. Given the multifaceted and complex nature of migration and lack of "multidisciplinary, robust investigations of climate change and human mobility" (Stapleton et al, 2017:7), there has been a failure, and there exists a need, to vividly link climatic impacts and internal migration.

At the same time, state responses to land scarcity, drought and internal migration have primarily focused on large-scale emergency relief, resettlement, social protection and the expansion of industrial parks. First, there are the emergency relief provisions in Ethiopia, including during the catastrophic famine of the 1980s, and over the 1990s, with up to 12 million people dependent on food aid in 2021 (WFP Ethiopia, 2021). Such measures may have helped food-insecure households to survive, but they have not enabled people to build back their productive assets and break out of dependency (see Tsegay, 2017). Second, resettlement (or villagisation) has a long history in Ethiopia and has been carried out by successive governments towards various ends, especially that of 'development'. Other justifications include reducing the impact of land scarcity, food insecurity, famine and environmental disasters that may lead "to distress or anticipatory migration" (Pankhurst et al, 2013:221; see also Planel, 2007; Hammond, 2008). Wolayta Zone has also historically experienced different kinds of resettlement schemes, variously aiming to address land scarcity, drought and famine, and to introduce a 'regulated internal migration'.

Resettlement has been viewed by the state as the "quickest, cheapest and [most] viable" option (Abbute, 2003), or a 'radical' and 'durable solution' (Pankhurst et al, 2013:162 & 243) to the food insecurity and chronic poverty faced by rural highland communities. These involuntary resettlement programmes have failed to fulfil the fundamental principles of assessment of development projects' impact on movement, however (World Bank, 2013). Lacking a "clear conception, a feasibility study, proper planning, adequate physical preparation and responsible management" (Gebre, 2009:119; see also Allen, 1993; Hammond, 2008), resettlement programmes have failed to achieve or maintain the expected impacts.

Another response to chronic poverty in the country is the government's Productive Safety Net Programme (PSNP). This is one of the biggest such intervention in Africa, and provides temporary direct support and public works employment to stabilise household consumption. Wolayta districts have a large number of safety net beneficiaries (Mota et al, 2019). At the time of writing, they are reaching just under 200,000 households, which equates to some 891,000 people (interview with the district programme coordinator, 2021). Despite their potential, Filmer and Fox (2014) argue that, since the PSNP does not set out to foster productive employment, it does not yield sufficient returns or significantly increase absolute income (ILO, 2012). The payments derived from participating in the PSNP are not adequate for building a productive asset base and moving away from the absolute poverty threshold.

Ethiopia has attempted to address high unemployment by developing an industrial strategy that seeks to attract domestic and foreign manufacturing firms to newly built industrial parks. This trend of promoting industrial parks in the country will, it is hoped, increase the employment prospects for internally migrating young people. As part of this policy, Ethiopia aims to establish ten industrial hubs across its regional states, with the Hawassa Industrial Park the first to be opened. With the focus on light and export-oriented manufacturing like apparel and textiles, the Hawassa Industrial Park aimed to hire 24,000 to 30,000 people in its first two years (Hardy et al, 2017; Schaefer & Oya, 2019). Inaugurated in 2016, it is the nearest park to Wolayta and the hope was that its establishment would improve access to employment within the region. Industrial parks attract large numbers of migrants in search of work and in many park locations local government agencies actively support such recruitment – the majority of the workers being women. Despite low wages and weak safety policies, Hawassa has been an ideal destination for young Wolayta. With strong growth and its newly constructed industrial park, Hawassa has high 'demand for labour' (USAID/FEWSNET, 2006). Recently, however, ethnicity-based attacks on young Wolayta in Sidama have made Hawassa a less attractive destination.[15]

In considering mobility and climate change within the various sustainable development agendas, we must also look at the wider national and global development discourses. For the past 30 years at least, Ethiopia has lacked a clear internal migration policy systematically linked with other, broader socioeconomic policies (Pankhurst et al, 2013). Some policies, such as the 1993 National Population Policy, discourage rural outmigration. Others fail to recognise the significance of internal migration in national economic development. Some also label internal migration as a problem that has contributed to uncontrolled and problematic urbanisation. For instance, the Sustainable Development and Poverty Reduction Programme describes spontaneous internal migration as "a source of economic, political and social instabilities" at destinations, which has contributed to "high rates of unemployment and the inaccessibility and inadequacy of existing services for low-income groups, which further exacerbates urban poverty" (FDRE, 2002: 56 & 126). Likewise, the government's flagship Growth and Transformation Plans do not give clear direction in relation to urbanisation and socioeconomic and environmental concerns surrounding internal migration.

In sum, national policies show critical gaps in understanding the interests of young internal migrants, with a low level of recognition of and protection for those who move. Policies have failed either to provide viable opportunities for those who decide to stay, or to explore wider or improved livelihood options for those who choose to move. In this context, the CRGE represents an important opportunity that could go further to promote green jobs and respond to internal migration. The CRGE mentions the creation of decent jobs but does not go beyond this. With this in mind, better understanding is urgently needed not just of migration decision making at the individual/household level, but also of the potential impact of the development processes and policies that the Ethiopian government is striving to establish. Internal migration can play a transformational role in the development of the urban labour force, if intertwined with forward-looking urban and national development strategies.

[15] For instance, in mid-2018 a total of '10 people died in the violence, 89 were injured and 2,500 displaced' due to the attacks made on the Wolaytas in Sidama (Davison, 2018).

7 Conclusions and recommendations

This study has investigated the multidimensional phenomenon of internal migration as it is influenced by land governance and climate change, through a case study of young people in Southern Ethiopia's Wolayta Zone. Wolayta youth's migration to other areas of Ethiopia is driven by a range of socioeconomic and environmental factors. A key point made by the analysis above is the convergence of climate change, land access and governance, and socioeconomic factors in driving youth outmigration from areas such as Wolayta, and that creating and sustaining youth livelihoods remains an urgent issue of concern. The study also argues that, while climate change and environmental degradation are key drivers of outmigration from rural areas, they are also opportunities for creating income generating and climate-friendly livelihood options for local populations. The key findings and recommendations from the study are summarised as follows.

1. A primary issue in the Wolayta Zone is land inheritance, scarcity and fragmentation, which has a critical impact on young people's ability to create and sustain livelihoods.

This is particularly acute for young women, who tend to be disempowered and neglected by customary land governance systems. Despite the growing interest in off-farm employment among youth, land rights and access are a critical concern in Wolayta and other areas of Southern Ethiopia. Research shows that land holdings have an important impact on young people's rural–urban migratory decisions in Wolayta, where those with larger land holdings are less likely to migrate.[16]

- *Facilitating or improving access to land rental, as an alternative to inherited land, must be explored further. The land rental market can play a critical role in supporting land-poor youth to establish agricultural livelihoods. An important step in this direction would be to advocate for the relaxing of current restrictions on the maximum number of years land can be rented and to change the rule that, at the maximum, only half the farm can be rented.*[17]

2. Climate change and ecological degradation exacerbate land fragmentation and scarcity by lowering crop quantities and quality, and negatively affecting food security. Young people are especially vulnerable in communities facing climate change and land poverty in rural Ethiopia – driving them to choose internal migration as a coping mechanism or adaptation strategy.

Simultaneously, combatting climate change presents an opportunity to create viable options for communities through the creation and promotion of green jobs and skills. As the example of the Humbo Project has demonstrated, despite its many successes *vis-à-vis* ecological restoration, the initiative has faced major challenges when it comes to managing community expectations, mobilising community members (especially youth), and ensuring women's participation.

[16] See Kosec et al (2017) and Bezu and Holden (2014b).
[17] See Bezu and Holden (2014b).

- *Future such initiatives must do more to take community interests into consideration.[18] This could include better and more meaningful collaboration with community members in developing shared goals. A targeted focus on young people and women is also recommended so that their livelihood needs and opportunities are embedded in large-scale green economy projects from the start.*

3. The search for work is a primary reason for young people's outmigration to urban areas.

The dearth of off-farm work options for Wolayta youth creates a high incidence of outmigration compared to other areas of Ethiopia. Whereas initiatives such as the Humbo Project hold the potential to transform rural areas both ecologically and economically, such efforts appear to have inadequately incorporated young people's current concerns and aspirations for the future.

- *Projects must take into consideration skills development requirements and fair compensation policies when designing activities, particularly those that involve youth who are at a socio-culturally consequential stage of their lives. Projects should promote off-farm livelihoods and associated skills tailored to local contexts. These could include entrepreneurial/vocational training, green job creation, and access to credit.*

4. Most national and global climate change mitigation policies overlook the connection between environmental factors and impacts on migration.

Priority tends to be given to issues concerning international migration and forced displacement, whereas internal migration receives considerably less attention. Moreover, Ethiopia has lacked a clear internal migration policy systematically linked with other socioeconomic policies.

- *Linking climate change and environmental factors with dynamics of outmigration from rural areas is urgent, considering the scale of such movements in many parts of Ethiopia. The CRGE must, therefore, make greater efforts to embed young people's livelihoods and wellbeing in the strategy. Poverty alleviation initiatives must, likewise, acknowledge and incorporate the linkages between climate change, land governance and youth outmigration.*

[18] See Biryahwaho et al (2012).

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