

Climate Variability and Development Interventions Influence Migration Aspirations and Capabilities of Project Beneficiaries in Southern Ethiopia

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Niklas Mayer^{1,2}, Tadele Dana Darebo², Elsje Fourie¹
and Giselle Bosse¹

Abstract

In recent years, the European Union (EU) and other donors have increasingly instrumentalised their development cooperation to meet their own domestic migration policy goals, under the assumption that different development interventions—such as building climate resilience – may result in less outward migration from the recipient country. However, it is not yet understood how increased climate resilience would influence individual migration aspirations and capabilities. We conducted 32 in-depth interviews (IDI) and eight focus group discussions (FGD) with beneficiaries of the EU RESET Plus climate-resilience building project in southern Ethiopia. Half of the respondents are adult direct beneficiaries, and the other half are indirect beneficiaries (youths 17–24 years old). By applying a modified aspirations-capabilities framework, we extended the migration-development nexus to climate change and climate-resilience building. We found that climate change worsened perceived conditions and prospects for the future, while the development intervention mostly reinforced already emerging migration aspirations. By improving agricultural output in the context of climate variability, the RESET Plus project contributed to supporting people who wanted to stay to actually be able to do so but also encouraging those wanting to leave by slightly increasing migration capabilities.

Keywords

Migration-development nexus, climate-resilience building, climate-related migration, migration aspirations, aspirations-capabilities framework

¹ Maastricht University, Maastricht, Limburg, Netherlands

² Wolaita Sodo University, Sodo, Southern Nations, Nationalities, and People's Region, Ethiopia

Corresponding author:

Niklas Mayer, Maastricht University, Maastricht, Limburg 6200 MD, Netherlands.

E-mail: n.mayer@maastrichtuniversity.nl

Introduction

Globally, climate change causes rising sea levels, shifting rainfall patterns, more severe droughts, and extreme weather events. According to IPCC predictions (2022), involuntary migration from locations with low adaptation capacity is expected as global warming accelerates. Governments, international organizations and NGOs have identified this challenge and increasingly fund climate change adaptation and resilience-building projects as main elements of their development cooperation. These projects aim to help individuals, households and communities to ‘withstand, cope, adapt, and quickly recover from stresses and shocks such as [...] drought and other natural disasters’ (European Commission n.d.). Likewise, the European Union (EU) increasingly implements climate-resilience building projects in the Global South – especially in Africa. The implicit assumption is that this type of development would curb migration flows (European Commission, 2021).

The EUTF is one of these programs that link climate-resilience building with migration, as stated in the official title of the program: ‘The European Union Emergency Trust Fund for Stability and Addressing the Root Causes of Irregular Migration and Displaced Persons in Africa’. More than a quarter of EUTF-funded projects are resilience-building projects, with Ethiopia being the second-largest recipient country under the EUTF. The EUTF (launched in 2015) was designed during the so-called ‘refugee crisis’, when the EU gradually came to define development cooperation as a tool to reduce migration (European External Action Service, 2016).

Despite the existence of large-scale resilience-building projects, there is not much academic evidence that would support the assumption of climate-resilience building leads to less migration. In existing research, the interlinkages between development and migration have been covered by the body of literature around the migration-development nexus. Until now, when researching the influence of development cooperation on migration, researchers have focused largely on economic indicators, neglecting the environment and climate change (Hunter & Simon, 2022). In this context, studies (Clemens, 2014; Dreher et al., 2019; Gamso & Yuldashev, 2018) have predominantly used macro-economic regressions to prove that emigration rises when the per capita income in less developed countries increases. Researchers have made progress in understanding the link between economic growth and international migration. However, the influence that individual development interventions aiming for better resilience to climate change consequences have on migration aspirations and perceived capabilities of the individual on the micro-level remains relatively unexplored.

Addressing this knowledge gap, this article aims to answer the research question: ‘How do climate change resilience-building projects influence migration aspirations and perceived capabilities of beneficiaries?’ For this purpose, we conducted qualitative research with EUTF project beneficiaries in Southern Ethiopia. We selected the RESET Plus project in the Wolaita zone as our case study, due to the zone’s relative stability, high out-migration numbers, significant climate variability and the presence of the RESET Plus project. The RESET Plus project is

designed to increase the coping capacity towards rainfall variability and drought of project beneficiaries, assuming that this would curb irregular migration (European Commission, 2021).

In the following section, we will outline what other scholars have claimed regarding the interlinkages between migration, climate change and development. Subsequently, we will describe our theoretical framework and we will outline our data collection approach, the study area and the researched development project. After the analysis section, we will discuss the role an increased resilience to climate change consequences had on migration aspirations and perceived capabilities among our study population. Applying a modified aspirations-capabilities framework, we found that the studied project increased the beneficiaries' likelihood of having a satisfactory harvest – even as the climate conditions worsen. This disincentivised precarious migration, and slightly encouraged improvement in migration.¹ Personal characteristics and circumstances, such as age, educational background, family responsibilities and land size, are important factors shaping migration aspirations and capabilities.

Migration, Development and Climate Change in the Academic Literature

Since the so-called 'refugee crisis' in 2015, there has been an increasing public interest in exploring policy options to use development interventions instrumentally to manage migration flows to Europe (Raineri & Strazzari, 2021). Receiving much criticism from the academic community, the studied EUTF programme has been seen as the manifestation of the tendency to use development cooperation for domestic migration policy goals (Carling & Talleraas, 2016; Castillejo, 2017; Clemens & Postel, 2018; Coggio, 2021). Being an umbrella programme for projects in 26 African countries, and comprising countless grant managers and implementing organizations, programming under the EUTF is described as opaque and it is regarded as unlikely that policy goals are implemented consequently on the local level (Castillejo, 2017; Clemens & Postel, 2018). Furthermore, there seems to be a focus on short-term goals, rather than on long-term development by EUTF projects (Coggio, 2021).

The trend of the body of literature that explores the role of development cooperation on migration has been to study the macro-level effect of development aid on international migration, using cross-country analysis (Clemens, 2014; Dreher et al., 2019; Gamso & Yuldashev, 2018). There are fewer studies (Black et al., 2022) that explore the influence of individual development interventions on migration movements at the regional and local levels. These macro-level studies have generally applied a narrow definition of development: development as a rise in per capita income only (Glick Schiller, 2020). Consequently, the focus on macro-level quantitative research has left the mechanisms of how different development interventions influence the migration aspirations of the individual relatively unexplored. In fact, the knowledge generated by mentioned macro-level studies focused on international out-migration is of limited use to understand many other complex migration situations, such as the case of Wolaita where

migration is predominantly internal within Ethiopia. In other words, ‘while more could be learned from refinements of cross-country regressions, that research program is unlikely to result in reliable guides to donors seeking to deter migration in a given setting’ (Clemens & Postel, 2018, p. 17).

In recent years, however, academic research has also begun to study the influence of other types of development on migration. In this regard, Thu Hien Dao et al. (2018) have found that improved education and better access to university increases migration from the Global South, Hörler Perrinet et al. (2018) argue that more research on the effect of peace-building interventions on migration is needed to better inform policy-making, and Wong and Güney Celbis (2019) suggest that improvements in human rights conditions in the country of origin would result in lower migration aspirations of potential migrants.

One of the development types that has not been systematically explored in the context of migration research is development interventions that intend to foster resilience to climate change consequences. Yet, climate change consequences and a changing environment impact human migration in their own ways (Carling & Talleraas, 2016; McLeman, 2009). Furthermore, climate change exacerbates key factors that define migration aspirations and perceived capabilities: ‘ageing, gender, place attachment, conflict, conservation and remittances’ (Adger et al., 2015, p. 4). The related development goals—NGOs and development agencies use the terms ‘climate-resilience’ and ‘climate adaptation’—are qualitatively different from rising per capita income. For instance, sea level rise could push inhabitants of a coastal area to move, even though their income remains stable.

Research on the interlinkages between in-situ climate resilience and migration has explored several aspects, including migration as an adaptation strategy to climate change (Black et al., 2011; Vinke et al., 2020), as well as the role of migration remittances for household climate adaption in the area of origin (Gemenne & Blocher, 2017; Tebboth et al., 2019). However, the influence of climate change resilience-building and climate change adoption on migration aspirations and perceived migration capabilities has received less attention. In other words, despite the increasingly sophisticated body of literature on climate change-related (im)mobility, the research around the migration-development nexus has not rigorously explored the impact of in-situ climate change-resilience building as a type of development, and its influence on migration (Etana et al., 2022; Kaczan & Orgill-Meyer, 2019).

Theoretical Framework —A Modified Aspirations–Capabilities Framework

In order to disentangle the role of development interventions that address climate change consequences in migration decision-making processes, the migration aspirations-capabilities framework is the suitable theoretical framework for this research. This framework was coined by Carling (2002), de Haas (2010, 2021), and Carling and Schewel (2018)² and allows for a differentiated understanding of the role different types of development might have on migration aspirations and perceived capabilities. The migration aspirations-capabilities framework relies on the thought process and decision-making of the individual. This framework has

been used by scholars (Koubi et al., 2022) to explore the influence of other migration drivers, but not yet to explore the influence of climate resilience.

The focus of the aspirations-capabilities framework on the individual perceptions and lived experiences, thought processes, migration aspirations and perceived capabilities reflects the claims of scholars that migration aspirations and decisions arise rather in the context of individual life aspirations and subjective perceptions of the conditions at home and in the desired region of destination—and are not so much an objective equation of push and pull factors (Carling & Schewel, 2018; De Haas, 2021). Similarly, throughout the analysis, we exclusively focus on the individual perceptions and lived experiences, thought processes, migration aspirations and perceived capabilities of respondents. Even though the framework focuses on the individual, it is important to notice that there are important household-level conditions and expectations that mediate the aspirations and perceived capabilities of each household member. In this context, food availability and income of the household as a whole are influencing household members' individual capability of both staying or leaving. Furthermore, household expectations towards female household members are noteworthy in patriarchal societies such as Ethiopia. Aspirations and perceived migration capabilities of women and girls are impaired by female household responsibilities and societal and cultural norms regarding female migration (Deshingkar & Tripathi, 2022).

Figure 1 draws on Carling and Talleraas' graphic on the processes that lead to migration and modifies it for the purpose of this article. The chain is therefore

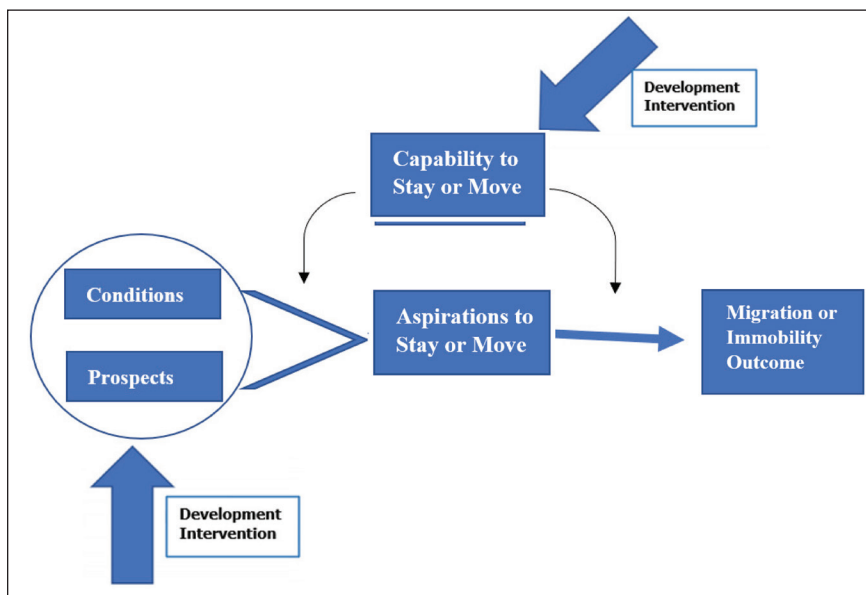


Figure 1. The Envisioned Influence of a Development Intervention on the Process That Leads to Migration or Immobility.

Source: Prepared based on: J. Carling and Talleraas (2016): Root Causes and Drivers of Migration: Implications for Humanitarian Efforts and Development Cooperation.

sensitised for the sake of exploring the points where development interventions influence the migration process. It is our hypothesis that a development intervention can influence the *conditions*, the *prospects for the future* and the *capabilities of staying or moving* of an individual. Food supply, income, livelihoods, and the resilience of agricultural production to climate variability would all fall under the *conditions* that the individual faces. These are the points focused on by the studied EUTF development project. The perceived prospects for the future might be influenced, as being supported by a development intervention potentially gives the beneficiaries hope for a better future. The perceived capability of both moving or staying is likely increased by the project if the income from agriculture is improved.

Lastly, the modified theoretical framework incorporates recent claims by authors (de Haas, 2021; Schewel, 2020) to give attention to both aspirations to move and aspirations to stay, capabilities to move and capabilities to stay, as well as both migration and immobility outcomes. This is particularly important because it is the intended effect of the RESET Plus project to increase aspirations and capabilities to stay.

Operationalization

The following table gives an overview of the concepts used in the theoretical framework (Figure 1) and their respective operationalization.

Table 1. Relevant Elements of the Migration Chain and Their Operationalization.

Concept	Used Definition
1. Conditions	The social, economic, environmental and political context. Due to the nature of the studied resilience-building project, the focus lays on the economic and environmental pillars, with a special focus to the specific categories livelihoods, agricultural production, food supply, income, perceived climate conditions, life satisfaction and living standard. ³
2. Prospects	Perceived opportunities hope for better conditions and a good life in the region in the future.
3. Aspirations to move or stay	In the case of aspirations to move, there is 'a belief that migration is preferable to non-migration' (Carling, 2002, p. 12). Aspirations to stay are a 'belief that non-migration is preferable to migration' (Carling & Schewel, 2018, p. 946).
4. Capability to move or stay	Perceived economic, social, political and human resources are needed to be able to either move or stay.

Data Collection

34 IDI and eight focus group discussions FGD were conducted between December 2021 and February 2022 in the Kindo Koysya and Boloso Sorie districts of Wolaita zone in southern Ethiopia. Local interviewers from the Wolaita zone realised the data collection in the local Wolaita language and translated the interview transcripts to English. Combining both IDIs and FGDs, we draw on a sample of 95 individuals, 50 of whom are household heads between 28 and 55 years old,

while 45 are youths between 17 and 24 years old.⁴ There is an equal gender mix. All informants live in a household that benefitted from the RESET Plus resilience-building project.

We applied random purposive sampling where selected interview partners should have received at least three training and already had at least two harvests applying conservation agriculture.⁵ IDIs lasted around one hour, FGDs approximately two hours and thirty minutes. FGDs had on average eight participants who had to sign that they would treat the opinions and descriptions of other participants confidentially. In both IDIs and FGDs, informants were anonymised.

Central to the approach of this study is the reliance of the research on perceptions and lived experiences of the informants. Since we consciously decided to not include quantitative data, the findings of this research should not be understood as representing total migration numbers. Rather, the perceptions, thought processes, opinions and associations informants were making are helpful to understand the mechanisms of how the development intervention that aimed to increase the beneficiaries' resilience to climate change influenced migration aspirations and perceived capabilities. Our scale of analysis, therefore, aims to address the call for a better understanding of the subjective migration decision-making processes (de Haas, 2021; Tabuga, 2017). Both from an academic and from a policymaking point of view, knowledge of individual perceptions of factors that influence migration plans is needed to 'improve measures that seek to influence the migration aspirations and behaviours of people' (Tabuga, 2017, p. 2). Probing people's views on their evolving conditions, prospects for future life aspirations and migration plans are the only way to explore the perceived influences of different factors (including climate variability and development interventions) on their migration aspirations and perceived migration capabilities. In this context, we specifically asked informants about the role of the changing climate or the changes brought by the development intervention for their migration aspirations and perceived capabilities.

Since the informants are beneficiaries of a development intervention, they might answer in a strategic way, in order to also receive support from the NGO in the future. However, the studied development project does only provide training and no financial support. Thus, there is less of an incentive to answer strategically for beneficiaries. We attempted to minimise all biases by highlighting the independent character of the research and encouraging informants to speak freely as they are anonymised. Furthermore, the field staff of the implementing NGO or foreign researchers were not present during the time of data collection.

To analyse the data, we used the qualitative data analysis software *Atlas.ti*. The interview questions for the data collection phase, as well as the codes for the data analysis phase, corresponded to the elements of the theoretical framework, which is represented in Figure 1.

Case Study: RESET Plus

The RESET Plus (full name: *Building Resilience to Impacts of El Niño through Integrated Complementary Actions to the EU RESilience Building Programme in Ethiopia*) is a typical climate-resilience building project under the EUTF umbrella

program. This is because it aims to address development-related challenges, which are exacerbated by climate change and seen to be drivers of migration. The aim of this article is not to take sides in the scholarly debate on the usefulness of the term ‘resilience’,⁶ but rather to explore the interlinkages between migration aspirations and development interventions that are aimed to foster resilience to climate change consequences. Since the case study of this article is the EU Reset Plus project, we adopt the definition of the European Commission (n.d.) on resilience-building here: ‘empowering them [individuals, households and communities] to withstand, adapt, and quickly recover from stresses and shocks, both from natural and man-made disasters’.

In this context, the RESET Plus project description acknowledges that the project areas face ‘food and nutrition insecurity in the context of extreme weather events and climate change’ (European Commission, 2021, p. 1). It is then assumed that increased climate-resilience, and thus improved livelihoods, income and food supply will curb irregular migration: ‘The proposed action intends to improve the food and nutrition security of the targeted areas and enhance the economic/livelihoods opportunities thus tackling the root causes triggering destabilization, and forced displacement and irregular migration’ (European Commission, 2021, p. 2). It is a country-wide project and takes place in eight different clusters throughout Ethiopia. In each cluster, local and international NGOs work to implement the project.

Wolaita is one of the eight RESET Plus clusters. The local implementing NGO, Terepeza Development Association (TDA), teaches climate-smart agriculture (conservation agriculture) to 4,000 project beneficiaries. Research studies have documented the increase of agricultural output when conservation agriculture was introduced in other countries (Michler et al., 2019; Siziba et al., 2019). In several rounds of trainings, TDA instructs the farmers to cover their farmland with leaves (mulched farming), which would keep the humidity in the soil, protect the land from drying up, and is even expected to help eroded and overused land to recover. Besides mulched farming, the instructions include crop diversification, saving and marketing strategies and sustainable use of the own farmland. The project started in November 2020 and was phased out in January 2023. Even though the EU Reset Plus project is under the umbrella program EUTF, which mentions the link of development to migration in its title, the project description for the Wolaita cluster does not contain any deliverables regarding migration. Compared to other development interventions, the RESET Plus project in Wolaita is, with 4,000 beneficiaries, relatively small. Our unit of analysis is not the change brought by the project to the Wolaita zone as whole, but rather to explore the role climate resilience plays in migration aspirations of the individual beneficiary.

The Wolaita zone is situated in the Southern Nations, Nationalities and People’s Region, approximately 350 km from the Ethiopian capital Addis Ababa. Most of the areas in Wolaita are mid-land, laying at an altitude of 1500m–1800m above sea level. Wolaita has two rainy seasons throughout the year: the small rainy season in March and April (*belg* season, approximately three weeks of rain) and the long rainy season from the end of June until the beginning of September (*kiremt* season, approximately two months of rain). Even though Wolaita is not as dry as the low-land areas in Ethiopia, climate change causes rainfall variability,

recurring droughts, environmental degradation, rising temperatures, and floods in the area (Tsegay, 2021). The large majority of Wolaita's population engages in rain-fed smallholder farming, cultivating crops such as cabbage, mango, onions, cassava, taro, coffee, corn, beans, and tomatoes. High population pressure, small land sizes and climate variability create developmental challenges in Wolaita: 71% of households in Wolaita are food insecure and do not have access to cover daily food supply (Tsegay, 2021). Against this backdrop, child and youth migration is very common, especially within Ethiopia, from the rural Wolaita areas towards the big cities of the country. In this context, almost every second household has at least one family member who migrated (Cochrane & Vercillo, 2019). The preference of Wolaita people for internal migration is linked to both financial constraints and a lack of social networks to envision international migration, as well as, with their attachment to their homeland and family responsibilities back home (Tsegay, 2021). Much of this internal migration from Wolaita is seasonal and temporary—including mobility to agricultural production sites for harvesting purposes and temporary informal activities in the urban areas. Besides the predominant internal migration, some household heads send their children to Gulf countries or the Middle East (Tsegay, 2021).

The applied aspirations-capabilities framework captures these different mobility forms. Internal youth migration in the context of hunger and poverty is termed 'precarious migration' (de Haas, 2021, p. 27)—characterised by a low capability of both staying and of moving long-distance. A household decision to send a family member abroad presupposes family resources and is accompanied by the expectation of not being able to fulfil the household goals in the area of origin—the aspirations-capabilities framework calls this 'improvement migration' (de Haas, 2021). While precarious migration is often a reaction to the lack of a reasonable option to stay (e.g., lack of food or lack of the necessary income to buy writing utensils and to attend school), improvement migration is rather planned and organised to progress in life over the long term.

Since the EUTF by its very title aims to address irregular migration, both precarious and improvement migration types are the target of funded development projects. The RESET Plus project description mentions the specific intention to curb 'distress migration' (European Commission, 2021), which can be regarded as a synonym for precarious migration, reacting to hunger, extreme poverty of conflict.

As explored in the analysis section, these mobility forms are mediated by food availability and income from agricultural production—which are both compromised by climate change. Since the studied development project aims to build resilience of agricultural production towards climate variability, both 'precarious migration'⁷ and 'improvement migration'⁸ will be at the centre of analysis.

Findings and Analysis

In the following analysis, we explore the perceptions of the informants regarding the elements of the theoretical framework, in order to answer the research question: 'How do climate change resilience-building projects influence migration

aspirations and perceived capabilities of beneficiaries?’ For this, we keep to the same order, as presented in the chain in Figure 1, that is, we first explore the conditions (agricultural production, food supply, income, perceived climate conditions, life satisfaction) and prospects for the future. Subsequently, we analyse the migration aspirations and perceived migration capabilities, as well as the perceived influence of the development project. In the subsequent discussion, we evaluate what an increased perceived climate resilience means for migration aspirations and the perceived migration capabilities of the informants.

Conditions

Informants generally agree that their food security has been deteriorating over the last years, agricultural output has been decreasing, and periods of hunger and insufficient food supply are becoming more frequent. When analysing the personal and household information of interview partners, there is a clear positive correlation between the size of the land plot that the household owns and the experiences of food security. Individuals in the town Manara have on average the largest land size. It is in this same area that the interview partners complain the least about hunger.

The deterioration of agricultural output and the consequential periods of hunger are strongly associated with both population pressure and changing climate conditions. Since household heads bequeath their land, divided into equal parts, to their sons, land size per household decreases with every generation. At the same time, the unpredictability of rainfall and changing rainy seasons, as well as more intense longer dry seasons pose a severe threat to harvests. The following quote illustrates the changing timing of rainfall and how it affects agriculture and consequently triggers hunger in the community:

We do not get rain after we sow seeds. The seeds die because of the dry seasons or sometimes heavy rain affects the crops. Therefore, people face challenges related to food security in our kebele.

(Interview, Male Household Head in Sere Finchawa, December 2021)

The farmers interviewed for this study sense that shifting rainy seasons, longer dry seasons and intense rainfall are a major threat to their crops. For this reason, one interview partner called the climate ‘a liar that hurts us’.

When we expect rain, there is strong sun and when we say it is sunny the rain comes and destroys the crop. The condition is so worrisome.

(Interview, Male Household Head in Boloso Sorie, February 2022)

All adult respondents rely on agriculture as their main and often only source of income – only one household out of 50 has another source of income (the household head is a teacher). There are no factories or industries in the study area that would create other job opportunities. Due to widespread poverty and a lack of job opportunities, parents struggle to financially support their children. Many families cannot provide shoes, clothes, school materials, school fees or sufficient food for

their children. The deteriorating agricultural production does not only affect food security but also income of families in the study area. The question of whether a harvest fails or not depends to a large extent on the weather conditions and further defines if the household will have access to food (and in the next step to income). To earn some income, individuals sell any agricultural surplus production at the market. Many interview partners are unsatisfied because of the decreasing income and food supply:

I am not living a satisfied life. The climate conditions are also not satisfying here. The sun and the rain destroy the crops and you get mostly hand-to-mouth from the farm.

I will not get money to buy clothes, shoes, or cattle. Due to that I am not happy.

(Interview, Male Youth in Zabato, December 2021)

Prospects for the Future

The questions on the prospects for the future revolved around individual assessments of the likelihood to have a good future in the home region. Across all age groups, there is a consensus that many factors—such as climate, land size, food prizes—are worsening and that ‘it will not be as good as in the times of our fathers’. While some informants do not give much importance to their own agency and believe that ‘only God knows the future’, there are other more optimistic interview partners who believe that they could work hard and improve their own situation on their farm. Especially those who experienced failed harvests recently are the most disappointed and do not expect a good future:

The sweet potatoes we planted for the month of May all died. We do not have any hope for the future. We finished eating the taro at this time without waiting until it has better yield, [...] many people are now starving.

(FGD, Female Household Head, Borkoshe, January 2022)

Notably, the younger age group has a relatively more positive perception of the future than the household heads. Among the household heads, only six out of 50⁹ informants think the future will be good. Among the youth, 12 out of 45 have a positive outlook. The more positive prospects for the future correlate with the perceived conditions of the individuals. In almost all cases when food security, income and climate conditions are seen as favourable, the prospects of the future are indicated as good. In most cases, individuals expect the future to be worse. Those same individuals describe their current conditions as difficult and insufficient.

Furthermore, when thinking about the future, the interviewed youth give high importance to education. Education is seen as a way of changing, getting more competitive jobs and getting out of poverty. For this reason, the youth in the study area sees the completion of education both as a motivation for migration and a constraint to migration. In other words, students might consider short-term migration to the big cities of Ethiopia, in order to pay for school uniforms, tuition fees and schoolbooks themselves. In order to not jeopardise their class attendance, students even aim to time this migration during the school holidays when the school is closed.

Since there is no other source of income for me like from factory work to support my education and other expenses, life is not very satisfying. Due to this, during summer school break, I go to Addis Ababa to get money to support myself.

(Interview, Male Youth in Hanaze, December 2021)

While the wish of completing school can contribute to temporary short-term migration, it is also one of the factors that makes individuals stay in their hometown instead of leaving the region permanently (at least till the end of school education).

We are trying to get educated. It keeps us from going until we finish school. Without knowing our fate, we do not want to migrate.

(FGD, Female Youth in Zabato, January 2022)

Migration Aspiration

When asking interview partners and FGD participants about migration, we started with the question: ‘What different types of migration do you know?’ The reason for asking this question first is two-fold. First, in the local Wolaita language, there are different words for different types of migration.¹⁰ Second, it was a suitable starting point to discuss migration aspirations and perceived capabilities of informants without pushing their answers in a certain direction.

Migration aspirations are higher among the youths: 20 out of 45 would like to leave their hometown.¹¹ Of those 20 youths motivated to migrate, 12 are female and eight are male. All except one of these 20 youths report very difficult conditions in their household. In other words, these youths do not have enough food, income, clothing and school materials. Furthermore, the level of migration aspirations varies greatly from town to town. In Zabato, 13 out of 15 youth informants have migration aspirations. In Manara, the picture looks different: only two out of 19 youth informants want to migrate.

These very different responses in towns that are geographically near to each other allow for important insights. On the one hand, respondents in Manara see their conditions (food supply, income, perceived climate conditions, life satisfaction) and their prospects for a good future in a relatively positive light. The vast majority report sufficient food, at least some opportunities to generate some income by selling crops at the market and perceived a positive trend in their area.¹² In contrast, in Zabato youth informants perceive their conditions and their future as negative. None of the 15 respondents have sufficient food in their household. Only one respondent indicates that her parents have enough money to buy her clothes and school materials. This is also the only person who perceives a good prospect for her future. Another difference between households in Zabato and households in Manara is their land size. The agricultural land of respondents in Manara is one hectare on average, while it is less than half a hectare in Zabato.

Next to the different conditions and land size that could explain migration aspirations among the respondents, in-group dynamics can further augment a migration flow from a town. If friends or acquaintances are in the region of destination and

call saying there was a job opportunity, this would prompt the individual to seriously consider migration. Interview partners in Boloso Sorie speak about ‘peer pressure’ and about ‘friends who try to convince their classmates to drop out of school’ and embark together on the migration journey to the big city. Almost all migration aspirations focus on the big cities or agricultural plantations in Ethiopia. Only two informants are thinking about international migration (Beirut and Dubai).

Compared to the younger age group, the household heads have a lower level of migration aspirations. Out of 50 informants from that age group, only eleven would like to migrate themselves—nine would like to move to the urban area with their families and two would like to migrate seasonally for work inside the country in order to support their families back home. Besides the 11 adults who would like to either move on their own or with their family, seven household heads would like to send their children to the big cities in Ethiopia or to the Gulf countries. While the two informants who want to migrate for seasonal work are both male, the adults who indicate their wish to move to the urban area with their whole family, as well as the ones who plan to send their children are male and female in equal proportions. All of the respondents from the adult age group with migration aspirations for themselves or for their children perceive their conditions and prospects for the future in their hometown as very negative—with the majority, reporting failed harvests due to worsening climate conditions.

Intra-household dynamics add another layer of complexity and shape the migration aspirations of the individual. Even though seven adults want to send their children to the city or abroad, most household heads forbid their children to migrate. In some cases, parents would encourage their children to migrate, in order to diversify the income of the household or to enable their children access to better education. In other cases, parents urged their children to stay at home and not leave the home region, as it is comparatively dangerous in other regions of the country.

In general, there is a consensus that climate change affects migration in the studied area. Since the food security and income of the local population depend largely on rain-fed agriculture, any anomalies in temperature, timing of rainfall, intensity of rainfall and length of dry seasons can decrease the agricultural output of households and whole towns. Consequently, bad harvests lead to insufficient food supply and little income. As described, child and youth migration from the studied area is particularly high:

The youths attend school while the mother and father give them money. If parents do not give them adequate money for food and clothes, they become anxious and migrate. Usually, the yield is small and money is not available.

(FGD, Female Household Heads in Borkoshe, January 2022)

Interestingly, there is a correlation between perceived conditions of the youth respondents and the remarks regarding the deteriorating climate. Individuals who mentioned that even if the climate further worsens, they will not consider migration are the ones who perceive their conditions in their hometown as positive. The ones who consider migration if the climate becomes more difficult for agriculture are the

ones who already see their food security, income, and life satisfaction as insufficient. For the household heads, this trend is not as clear, as marriage, age and family responsibilities decrease their migration aspirations and perceived capabilities.

The Aspiration to Stay

As mentioned at the beginning of this section, the majority of respondents do not want to migrate (64 out of 95 respondents). Almost all household heads who have aspirations to stay had a negative experience of migration, either because they themselves or a family member suffered during previous migration journeys. In this context, ‘working like a slave for someone else’ is a very common choice of words of informants. While many youth informants also have a negative perception of migration, the main reason for not migrating is to follow education. Within this age group, people are in grades 5–12, with only few exceptions who already finished high school.

Furthermore, migration aspirations decrease with age: out of the 15 informants who are older than 35 years, only two informants consider migration for themselves. The others indicate their age and family responsibilities as the reason why they did not leave their hometown. Similarly, informants whose household has agricultural land of at least one hectare have a lower desire to migrate (four out of 16 consider moving).

Perceived Migration Capability

Several points raised in the foregoing section define the individual’s perceived migration capability. A higher age, health problems, as well as family members that the individual has to care of at home are straightforward limitations to one’s migration plans. Moreover, the security situation in Ethiopia—especially in light of the conflicts in the Tigray, Oromia, Afar and Amhara regions, which were ongoing during the time of the interviews—limits the available places to go to or pass through.

Opinions regarding the availability of financial means are mixed. On the one hand, many individuals want to stay in their home region. However, they feel that poverty and lack of basic needs and school materials push them to migrate (precarious migration). This might suggest that if these respondents had a viable option to stay and attend school, fewer of them would migrate. On the other hand, there is also a considerable amount of people who dream of moving to the urban area for the sake of a better life quality, as soon as they have the needed money (improvement migration). Generally, it is rather young people and students who fall under the first category of preferring to stay with their parents following education, and it is rather younger household heads who aspire to move to the urban area with the whole family. All informants from the youth group who have migration aspirations are thinking about destinations within Ethiopia, while two household heads consider sending one of their children to Dubai or Beirut. This is because young people who decide individually to migrate do often not have the perceived migration capability to cross borders.

There are also important gender considerations that should not remain unmentioned. The following quote suggests that girls and women are more vulnerable at

the migration destination and in transit. Furthermore, in the cultural and social context of the studied area, female migration is widely disapproved of, which decreases the perceived migration capability:

I have no room to migrate since I am female. [...] Men migrate more than women if the climate is not conducive to farming. Females are afraid to migrate because they may face a challenge at the migration place. In our community there is no acceptance for female migration. Due to this reason, women migrate rarely.

(FGD, Female Youth in Zabato, January 2022)

While their perceived migration capability is lower, female informants have higher migration aspirations than their male counterparts. Within the youth sample size, 12 out of 21 female youths want to migrate, compared to only eight out of 24 male youths. The girls and young women mention their desire for an urban lifestyle, better job and education opportunities, as well as the inability of their parents to fulfil their needs. In contrast, many boys and young men already had negative migration experiences and express their intention to ‘work hard’ in their hometown. These differences in migration aspirations reflect the social responsibilities—sons must provide for their parents as they get old and help on the agricultural land of the household (which they will inherit in the future).

The Perceived Effect of the Climate-Resilience Building Project

As outlined in the methodology section, most of the interviewed project beneficiaries had received three trainings by the time the IDIs and FGDs were conducted. Households had started to apply conservation agriculture on their own farms and already had two or three harvests with this new approach. All interview partners report a positive effect brought by conservation agriculture. As farmers covered the soil with leaves, the land became more fertile and recovered more rapidly. The sun rays did not directly touch the soil, drying it up, and humidity from the rainy season was kept in the soil. Informants concurred that the taught conservation agriculture increased their agricultural output, their capacity to earn income selling their crops at the market and the likelihood of their cultivated plants withstanding climate variabilities, long dry seasons and heavy rains:

After conservation agriculture was introduced into the community there was a significant change observed even though there is a worsening in the climate condition. No matter how dry the season is, the crops survive because of the fertility of the soil. Therefore, people are getting what they need for their home consumption. Not only this but also their income has increased.

(FGD, Male Youth in Manara, January 2022)

The Link of the Project to Migration

It is therefore fair to say that the studied development intervention influences the perceived food security, income and resilience towards climate variability of farmers who apply conservation agriculture. The scope of the article was then to explore how the improved agricultural output influences migration aspirations

and perceived migration capabilities of the individual. As expected, there is not only one single underlying mechanism. During the data collection, we specifically asked informants about their perceived influence of the changes brought by the development project on their migration aspirations and perceived capabilities, for example. If the informant states that the project increases his/her agricultural output, income and available food, we asked what that, in turn, means for migration wishes and plans for the future.

The agricultural improvements brought by the project help to address challenges like hunger, and the need for clothes, books and pencils for students—which are often drivers to move. In this sense, especially for the youth, the project seems to rather encourage the wish to stay, discouraging precarious migration:

If I do not have clothes here, shoes and soap, [...] and if I do not have money to buy books and a pen, these conditions may challenge me not to stay here. And also hunger and lack of water. The project helped me to respond to these challenges. For example, if my father sells onions and buys clothes, books and pens for my education; [...] it influences me not to migrate.

(Interview, Male Youth in Zabato, December 2021)

The quoted example is from a youth interview partner who has aspirations to stay. His perceived capabilities to realize his wish of staying consist of his basic needs such as food, water and clothes – which are positively influenced by the RESET Plus project. Furthermore, IDIs and FGDs suggest that the project also contributes to decrease the migration aspirations of adults, as well as to increase their capability of staying:

I am not eager to move so the project makes me more comfortable here in our home area. We can educate our children here and pay for their school expenses.

(FGD, Female Household Head in Borkoshe, January 2022)

Even though the described influence of the project on migration aspirations and capabilities of youths and adults is the predominant one, there are also other trends identified. Some parents are incentivised to use the money from the improved harvests to send a household member to the city or abroad, in order to diversify the household's income:

I do not think I will move but maybe I will send my children getting something better from the agriculture here.

(Interview, Male Household Head in Sere Finchawa, December 2021)

For example, we sent my sister to Dubai. She is living there right now. I also contributed my part to her. [...] I got that money to support her from the money I got generally from all my works including the conservation agriculture.

(Interview, Male Youth in Boloso Sorie, February 2022)

Revisiting the aspirations-capabilities framework, we can observe that precarious migration in the absence of a 'reasonable option to stay' (de Haas 2021, p. 27) is

reduced and made less necessary as agricultural output, food security and income are increased. In the case of the most common mobility form from Wolaita—precarious, temporary youth migration within Ethiopia—this type of migration is decreased if food and financial means for school materials and clothes are available at the household level. Since the vast majority of Wolaita children and youths aspire to stay with their families and attend school, the observed climate resilience and better agricultural output can contribute to realising their aspirations of staying by increasing their capabilities. At the same time, improvement migration might be increased by the project as could be seen in the quotes above, where households plan to send one of their family members.

Nevertheless, the influence of the project on migration aspirations and perceived capabilities has to be seen as moderate. This is because it confirms pre-existing migration goals and opinions, rather than turning life plans of interview partners completely around. There is a clear correlation between perceived migration aspirations, capabilities, conditions, and the effect of the RESET Plus project on migration plans of informants, that is, respondents who indicate to have no migration aspirations are further encouraged in their decision to stay by the effects of the project. On the other hand, informants who aspire to send their children or to move to the urban areas feel enabled to realize those plans thanks to the increased agricultural production.

There were only very few exceptions¹³ where the motivation of staying or leaving is reversed by the effect of the project. One of these exceptions is a male household in Borkoshe who already made his migration plans to move temporarily to the city of Adama in central Ethiopia as of January 2022. He, however, changed his mind because he ‘saw the benefits of the project on his own land’.

Finally, some interview respondents dream of an urban, or in some cases even international life. In the light of the positive effect of the project, these individuals perceive themselves more capable of realizing this wish of improvement migration. For almost all informants, the change brought by the project increases their hope for a better future—the first couple of harvests proved them capable to increase their agricultural output, income, and their resilience to climate variation.

Conclusion

The foregoing discussion showed that the studied development intervention indeed influences the process that leads to migration or immobility at the two expected points (as illustrated in Figure 2 with the two green arrows), that is, the *conditions*, *prospects for the future* and perceived *migration capability* were altered by the introduction of conservation agriculture. The interview partners report an increased agricultural production, food supply, and income and feel better prepared to withstand long dry periods and intense rainfall. Furthermore, the already existing migration aspirations of individuals are reinforced, meaning that the development intervention modestly supports the status quo by helping beneficiaries who wanted to stay to stay and encouraging the ones wanting to leave by slightly increasing the capability of both staying or leaving (see Figure 2).

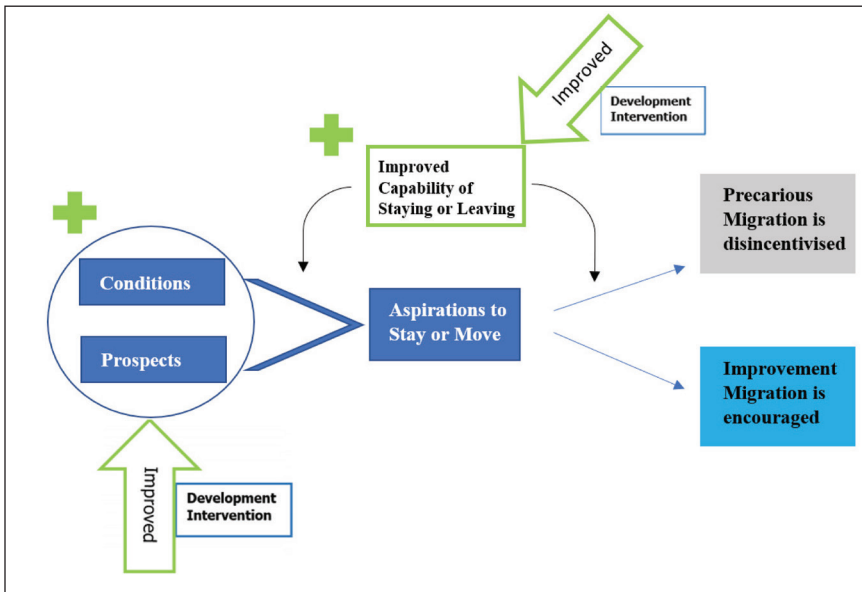


Figure 2. The Proven Influence of the Development Intervention on the Process That Causes Migration or Immobility.

Source: Prepared based on: Carling and Talleraas (2016): Root Causes and Drivers of Migration: Implications for Humanitarian Efforts and Development Cooperation.

As we saw in previous sections, the majority of interview partners would prefer to stay in their hometown, close to their family. However, many felt obliged to consider migration in the light of their life conditions. The perceived obligation to migrate due to scarcity—that is, precarious migration—was decreased by the development intervention and individuals felt more capable of staying. Conversely, some individuals aimed to migrate or send one of their children but did not have the financial means to realize this wish. With the changes brought by the project the perceived capability of moving (or sending)—improvement migration—appeared higher.

Even though the studied development intervention is small in its size, it has made a difference in food security, income, aspirations and perceived capability of beneficiaries. As introduced earlier, the improved agricultural output brought by the introduction of conservation agriculture has also been documented in other countries (Michler et al., 2019; Siziba et al., 2019). Related to this body of literature, our findings add the contribution of conservation agriculture to withstand prolonged dry seasons and rainfall variability. Furthermore, our research builds on first insights into the effect of in-situ climate adaptation on migration. Namely, climate risk perceptions and subjective adaptive capacities are key for the perceived capabilities of the individual to realise the aspiration to stay (Blondin, 2021; Etana et al., 2022). Consequently, if the perceived climate risk and subjective adaptive capacity are positively influenced, individuals will feel encouraged and enabled to realise their aspiration of staying.

Development interventions that aim to address climate change consequences shape migration in their own way. This underlines our claim from the introduction that researchers should aim to study the influence of development on migration in a more nuanced, systematic way, departing from the economic-centred definition of development. As described in the literature review, the trend in scholarly debate has been to do macro-level regressions to measure international migration flows from a country that experiences economic development. This reliance on the macro-level does not allow to uncover the mechanisms how different development interventions lead to different migration outcomes on the micro level.

The fact that with the effect of the resilience-building project, migration becomes less likely for many individuals (e.g., students following school), and more likely for some (e.g., household heads sending one of their family members), underlines the multitude of factors and personal characteristics that play into the migration aspirations and capabilities of people. In country-level studies on aggregate migration flows, these nuances rarely come out. Our analysis showed that depending on the local-level characteristics and individual life aspirations, several migration trends can occur simultaneously. This is proof that we should not expect uni-causal, universally applicable mechanisms in the relationship between development and migration.

Applying the modified aspirations-capabilities framework—combined with qualitative research and open-ended questions—allowed us to trace the influence of a changing climate and the development intervention in the subjective migration decision-making process. We found that climate change worsened conditions and prospects for the future, and the development intervention mostly reinforced already emerging migration aspirations. The EU's assumption of the RESET Plus project reducing irregular migration by increasing the resilience to drought and rainfall variability, improving food security, as well as enhancing livelihood and economic opportunities can be seen as only partially true—while precarious migration is curbed, improvement migration is enabled.

Lastly, the occurrence of precarious and improved migration provides interesting insights regarding the different timings of migration and the differentiated short-term and long-term impacts of development on migration. While more resilient agriculture can decrease precarious youth migration in the short term, migration after finishing school is still likely.¹⁴ This shift of exchanging precarious migration for improved migration constitutes progress for human development and resilience, as it implies completing school education and staying with the family instead of migrating at a premature and vulnerable age. While the EU already possesses some of the tools to increase resilience, it must be willing to decouple this from its desire to curb migration.

Geolocation Information

Wolaita Zone, SNNPR, Ethiopia

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Notes

1. These types of migration was coined by De Haas (2021) and will be further described in the theoretical framework section.
2. While Carling (2002) and Carling and Schewel (2018) speak about the aspirations-ability theory, de Haas (2021) uses the term aspirations-capabilities framework. We use the term aspirations-capabilities framework for this article because as opposed to the aspirations-ability theory, it better ‘encompasses [the] two-way connections between migration and development’ (Carling & Schewel, 2018, p. 956).
3. Individual circumstances such as land size, family situation, education, and previous migration experience are important intervening variables that shape conditions, migration aspirations and capabilities. These are qualitatively different from conditions, as they cannot be influenced by climate change or the studied development intervention.
4. The categories are positional. While household heads are direct beneficiaries of the project, the younger group are sons or daughter of direct beneficiaries and therefore indirect beneficiaries themselves.
5. In the case of the interviewed youths, it was their parents who had received the trainings.
6. See for instance Ferguson and Wollersheim (2022) for an account on the rise of the term resilience in development studies, its ambiguity and its criticism.
7. Even if it is short-distance and for a short period of time.
8. Which could be internal or international, and an individual or household decision.
9. Since the sample size of our qualitative study (95 respondents) is relatively small, these number should not be seen as representative or expressing robust correlations. Rather, our study aims to explore the mechanisms behind decisions and developments. We include numbers here to give ideas how many respondents feel or think a certain way.
10. *Betiya* refers to displacement in the context of famine, drought or conflict. *Ooso koshsha* is voluntary migration to find a job or to study. *Goosaa* is a group or community-based migration decision if an area becomes uninhabitable.
11. Either permanently or temporarily. Including precarious migration and improvement migration as seen by the aspirations-capabilities framework.
12. From IDIs and FGDs, it seems that in Manara land sizes are larger, soils more fertile and climatic conditions slightly better than in the other studied towns. The better climatic conditions are likely linked to the fact that Manara is situated in a higher altitude than the other towns.

13. In only five out of 95 informants, previous plans of staying or leaving was reversed by the effects of the project.
14. Due to structural problems, such as lack of job opportunities and land scarcity.

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