

ORIGINAL ARTICLE

Open Access



Translocal vulnerability of temporary rural–rural labor migrant-sending households in Quarit district, Northwestern Ethiopia

Linger Ayele^{1*} and Terefe Degefa²

*Correspondence:
lingua1989@gmail.com

¹ Department of Geography and Environmental Studies, College of Social Sciences and Humanities, University of Gondar, Gondar, Ethiopia

² Center for Population Studies, College of Development Studies, Addis Ababa University, Addis Ababa, Ethiopia

Abstract

The current era of globalization is accompanied by vulnerabilities of migrants at their destination. Although such cases possibly shape the vulnerabilities of migrant-sending households through the network of migration, most studies give little attention to these spatial vulnerabilities. Informed by the translocal approach, this article attempts to bridge this gap based on a mix of quantitative and qualitative data generated from households that send temporary labor migrants to export-oriented cash crop growing areas in Ethiopia. Quantitative data were collected from randomly selected 250 migrant-sending households and analyzed using descriptive statistics. Qualitative data meant to support quantitative data were gathered before and after collecting quantitative data through focus group discussions, key informant interviews and a review of secondary sources. The findings demonstrate that temporary rural–rural labor migrants are vulnerable to multiple shocks at their destination. These vulnerabilities of migrants are transferred to migrant-sending households through migration networks and result in various degrees of negative livelihood outcomes such as asset decumulation and food insecurity depending on the type of migrant-households. It is learned, in this case, that a localized approach to vulnerability analysis appears inadequate in revealing the whole spectrum of vulnerability. The implication is that efforts meant to address migration-related vulnerability require coordinated responses involving actors situated both at the origin and destination of migrants. Interventions to address migration-related vulnerability also require mainstreaming migration into national development policies and strategies designed based on a translocal approach.

Keywords: Rural–rural labor migration, Translocal vulnerability, Food insecurity, Asset decumulation

Introduction

Scholarly studies on the livelihood outcomes of migration widely note that migration smooths consumption, creates savings, provides investment capital, loosens constraints and reduces the vulnerability of migrant-sending households (Islam & Herbeck, 2013; Steinbrink & Niedenführ, 2020; VanWey, 2003). However, migration has the potential to introduce and exacerbate the vulnerability of migrant-sending households through the

vulnerability of migrants at the destination (Etzold & Sakdapolrak, 2016; Islam & Herbeck, 2013; Lawreniuk & Parsons, 2020; Winkels, 2004).

Vulnerability linkages between the origin and destination of migrants can take various forms. When migrants lose their investment at the destination owing to market shock, for example, they are obliged to pool resources from the origin that put migrant-sending households at risk (Winkels, 2004). Reduced remittance to migrant-sending households due to limited opportunities at the destination is another source of vulnerability (Lawreniuk & Parsons, 2020; Nunan, 2010). Similarly, migration creates and perpetuates the indebtedness of migrant-sending households when households take loans to sponsor migration which cannot be repaid due to migrants' failure to remit money to their households (Islam & Herbeck, 2013; Lawreniuk & Parsons, 2020). Pieces of evidence also show the various ways by which migrants' exposure to health shocks at the destination bring negative livelihood outcomes on migrant-sending households (Nunan, 2010; Steinbrink & Niedenführ, 2020).

These cases indicate that the sources of migrant-sending households' vulnerability are linked to other places through migration (Rigg, 2007; Steinbrink & Niedenführ, 2020), which in turn show that vulnerability is influenced by translocal relations (De Haan, 2000; Lawreniuk & Parsons, 2020; Steinbrink & Niedenführ, 2020; Zoomers et al., 2011). The concept of translocality points to the 'traveling realities' of households' livelihood vulnerability as a result of their integration into the environmental, institutional, economic and social conditions of different places (Lohnert & Steinbrink, 2005; Rigg & Salamanca, 2009; Steinbrink & Niedenführ, 2020).

Translocal vulnerabilities can prevail in the context of various vulnerable forms of migration. Currently, internal migration in the form of temporary rural-rural labor migration to the lowland areas of Ethiopia has become a common and vulnerable type of migration that exposes migrants to health, employment, market and other types of shocks at their destination (Linger & Terefe, 2018; Tsegaye, 2016; Woldie et al., 2010). The question is whether these shocks have an impact on the livelihood vulnerability of migrant-sending households. Except for a few studies that tangentially consider migration-induced translocal vulnerability of migrant-sending households (see Etzold & Sakdapolrak, 2016; Islam & Herbeck, 2013; Lawreniuk & Parsons, 2020; Winkels, 2004), there are no focused researches on this form of vulnerability especially in the context of rural-rural migration which is a common form of internal migration in Sub-Saharan Africa (Lucas, 2015). Thus, this article contributes to the literature on translocality and vulnerability by taking evidence from temporary rural-rural labor migrant-sending households in Quarit district, Northwest Ethiopia.

The article is organized into eleven sections. Following the introduction, the historical background of migration in Ethiopia is covered. The third and fourth sections deal with the conceptual basis and methodology of the article, respectively. While section five considers the characteristics of migrants, section six presents patterns of migration. The ownership of key livelihood assets and food security status of migrant-households are presented in section seven. Sections eight and nine, respectively, cover destination-induced shock exposure of migrant sending households and their subsequent translocal vulnerability to asset decumulation and food security. Discussion of results comes in section ten, while the conclusion is provided in the final section.

Historical background of internal migration in Ethiopia

Ethiopia has a long history of internal migration that shapes the present patterns of settlement. There are dual patterns of internal migration in the country, i.e. both from rural to urban areas and from one rural area to another rural area. Rural–rural migration contributes the largest share of internal migration across the three consecutive census periods of the country. It comprised 56% of internal migration in 1984 (Central Statistical Agency [CSA], 1991), 49% in 1994 (CSA, 1998) and 47% in 2007 (CSA, 2010) followed by rural–urban migration with a share of 29%, 25% and 27% during the census years respectively. However, the first-ever national migration survey conducted in 2021 indicated that rural–urban migration accounted for the majority of internal migration (32.2%), followed by urban–urban (25.9%) and rural–rural (23.4%) migrations (CSA, 2021). This implies a shift in dominance from rural–rural to rural–urban migration in the trends of internal migration in Ethiopia.

The country started population registration on internal migration in 1984. This makes it difficult to analyze the earlier migration patterns of the country. Thus, the patterns of migration are being inferred from the prevailing social, economic and political conditions of the time (Sosina & Holden, 2014).

The spatial pattern of migration before 1974 was rapid rural–urban migration caused by improved municipal services and the emergence of small commercial, administrative and industrial towns especially following the end of the Italian occupation (Feleke et al., 2006). During this period, there was also an overall temporary and permanent rural–rural migration from northern highlands to coffee growing areas in south and southwest and irrigated sugarcane and cotton commercial farming in the rift valley areas (Markos, 2003; Pankhurst et al., 2013). By the early 1970s, about 50,000 seasonal migrants came to the Southeast, largely from South Begemider and East Gojam in Northern highlands and Gurage in Shewa province (Woods, 1983).

In the period between 1974 and 1991 (military rule), internal labor migration slowed down due to confiscation of private commercial farms and the restriction imposed on movement out of one's peasant association through the introduction of a pass system. However, a civil war between 1984 and 1994 contributed to large-scale migration into urban centers (Feleke et al., 2006).

When the military rule in Ethiopia was overthrown in 1991, the Ethiopian People's Revolutionary Democratic Front came to power and established regional states along ethnic lines. This drives the dominant patterns of migration within the same ethno-regional states (CSA, 2000; Linger & Terefe, 2018; Markos, 2003). Resettlement programs, which are assumed to be engines of self-initiated migration from the origin of resettlers, are also designed to occur within the same regional administration (Pankhurst et al., 2013). Some, however, argue that despite ethnic-based regional administration which is expected to limit inter-regional migration, spontaneous migration between regions occurs in different corners of the country (Zelalem, 2009).

Post-1991 has also come with elevated temporary rural–rural labor migration from highland to lowland areas of the country to exploit temporary employment opportunities in export crop producing lowland areas (Linger & Terefe, 2018; Woldie et al., 2010). It is estimated that annually about 350,000 people migrate to the lowland areas of North-western Ethiopia alone for seasonal agricultural wage labor employment (Schicker et al.,

2015). As noted elsewhere, despite its contribution to creating livelihood opportunities, temporary rural–rural migration in Ethiopia exposes migrants to various forms of shocks at the destination which can be a source of translocal livelihood vulnerability of migrant-sending households.

Translocal approach to vulnerability analysis

Presently, migration is no more understood either as a one-way movement of individuals and households between origin and destination or solely as a movement of people (Gilles, 2015; Lawreniuk & Parsons, 2020). Rather, it must be seen as an integral part of the production and reproduction of livelihoods systems across space (Dame, 2018; Lawreniuk & Parsons, 2020; McSweeney, 2004; Steinbrink & Niedenführ, 2020). These features of migration have been considered and studied under the translocal livelihoods approach (Islam & Herbeck, 2013; Lohnert & Steinbrink, 2005; Schöfberger, 2017; Steinbrink & Niedenführ, 2020) though some prefer to use the term multi-local livelihoods (see de Haan, 2000).

However, the term translocal, being general, has no single agreed-upon definition. See Steinbrink and Niedenführ (2020) for the various definitions and understanding of translocality. It is the product of migration as well as individuals and collective practices of people, actors and institutions that transcend different places (Dame, 2018; Steinbrink & Niedenführ, 2020). From a livelihood perspective, the term ‘translocal’ by and large refers to the “spatial dimension of livelihood creation: transgressing the limits of purely local forms of exchange and livelihood creation” (Greiner, 2009, p. 10). It draws on transnationalism which refers to “the processes by which immigrants build social fields that link together their country of origin and their country of settlement” (Schiller et al., 1992, p. 1). By extending the concept of transnationalism, scholars use the concept of translocality (Brickell & Datta, 2011; Greiner, 2009; Islam & Herbeck, 2013; Lawreniuk & Parsons, 2020) to refer to the socio-spatial links created by migrants in the context of internal migration. Translocality also questions and addresses the placelessness (detritorialization) of social spaces argument of transnationalism (Brickell & Datta, 2011; Lawreniuk & Parsons, 2020; Steinbrink & Niedenführ, 2020).

Also, translocality as an important approach of livelihood analysis (Etzold, 2017) addresses the limitations of the Sustainable Livelihoods Approach (SLA). SLA has been sturdily criticized because of its weakness in addressing livelihoods from place relations (e.g. relations between origin and destination of migrants) (Etzold, 2017; Steinbrink & Niedenführ, 2020). In translocal livelihoods, a given place is understood based on both its situatedness and its interrelationship (connectedness) across place and scale (Lawreniuk & Parsons, 2020; Zoomers et al., 2011). It is in such understanding that the idea of translocal is utilized in the study of vulnerability and the use of the term translocal vulnerability. It is argued that previous vulnerability studies ignore vulnerability formation beyond the local context (Lohnert & Steinbrink, 2005; Steinbrink & Niedenführ, 2020).

The translocal approach assumes a dynamic relational perspective of a place (Gilles, 2015). This ‘relational space’ is produced by networks (Etzold & Sakadapolak, 2016)

which are formed by migration, resource flow, trade, information flow and communication via modern technology and participation in decision making (Islam & Herbeck, 2013; Lawreniuk & Parsons, 2020). Thus, the importance of migration in the creation of vulnerability rests on constructing networks that link the vulnerability of places and people over a wide range of distances (Etzold & Sakdapolrak, 2016; Islam & Herbeck, 2013; Lohnert & Steinbrink, 2005).

In analyzing migrant-households' vulnerability, it is important to assume two crucial points based on practical and analytical reasons. First, although the explicit exposure units to shocks at the destination are migrants, migrant-sending households at the origin are taken as exposure units to these shocks because temporary labor migrants are their members. In this tone, temporary labor migrant-sending households include those households whose member (s) are involved in temporary rural-rural labor migration from Quarit district to other districts at least for 1 month but not more than 12 months preceding the survey period. Such a time-bounded understanding of temporary migration may, nonetheless, miss some temporary migrant-households but allows the exclusion of the majority of migrants that leave their origin permanently (VanWey, 2003).

Second, as vulnerability is a multi-dimensional and multifaceted concept and used differently in diverse contexts (Casale et al., 2010; Downing et al., 2005; Paul, 2014), it requires contextual definition. Popularly, vulnerability is defined as:

Exposure to contingencies and stress and means for coping with them. Vulnerability thus has two sides: an external side of risks, shocks and stress to which an individual or household is subject; and an internal side, which is defenselessness, meaning the lack of means to cope without the damaging loss (Chambers, 1989, p. 33).

This definition contains three important components: exposure to shocks; the capacity to cope with shocks; and undesirable livelihood outcomes of poor recovery from shocks. Thus, migrant-households vulnerability to food insecurity and asset decumulation considered in this article are the undesirable outcomes of exposure to shocks.

A shock is defined in this article as an adverse event (such as crop failure, a market shock, employment shock, health shock and crime shock at the destination) that causes a loss of migrant sending households income, consumption, productive asset and create a serious concern about welfare (Dercon et al., 2008). The article, thus, uses translocal approach to evaluate the extent and the ways by which temporary labor migrants' exposure to these shocks at the destination effect migrant-sending households to some negative livelihood outcomes such as asset decumulation and food insecurity.

Methodology

Study area

Ethiopia's present population is estimated to be 120,812,698 (UNFPA, 2022). Agriculture is the backbone of the Ethiopian economy. In the 2019/20 fiscal year, agriculture constituted 32.7% of GDP, while the service sector and industrial sectors accounted for 40% and 29% of GDP, respectively. Despite a declining contribution to GDP over the past decades, agriculture is still the source of 70% of export earnings and livelihoods base of 80% of the population (Zerihun et al., 2015).

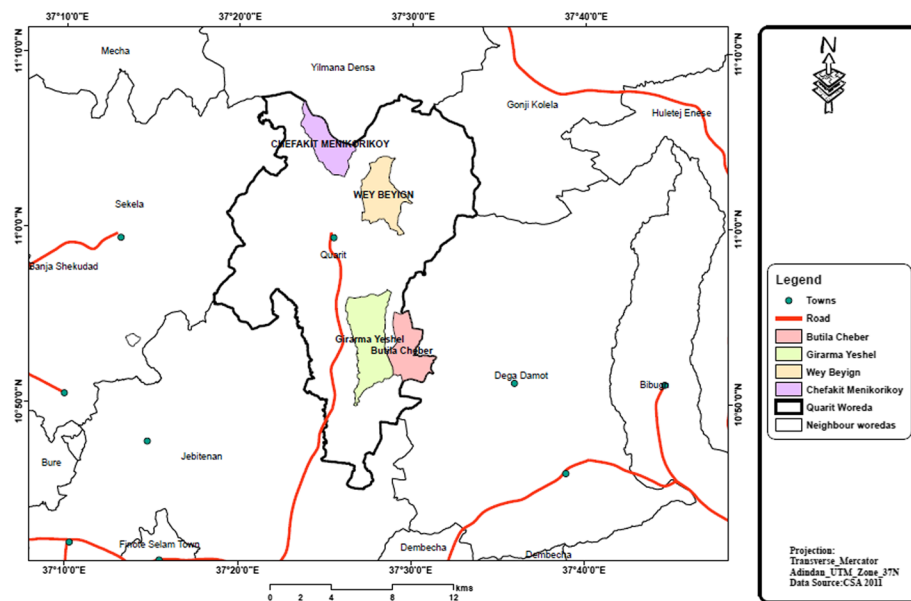


Fig. 1 Map of the study district and *kebeles*. Source: CSA (2007)

Ethiopia's agriculture is vulnerable to drought, making rural households vulnerable to famine. Food insecurity is severe in the country. Thus, the achievement of food security has been the major goal of Ethiopia for a long time. However, meeting household food security from own production by various smallholder farm households has remained increasingly difficult. Under such cases, shock experiences are mostly translated to a negative change in livelihoods (Dercon & Hoddinott, 2003).

The study area, Quarit district (Fig. 1), is one of the rural–rural migrant-sending districts in Ethiopia. It is located in Amhara National Regional State and has 30 *Kebeles*¹ where 28 are rural (Quarit District Administrative Office, 2015). It has an estimated population of 141,364 (69,792 males and 71,572 females) (CSA, 2021). The rural and urban populations account for 93.87% and 6.13%, respectively (CSA, 2013).

Situated within an altitude range of 1861–3519 m above sea level, the district has two main agro-ecological zones: *Dega* and *Woinadega* covering about 51.7% and 46% respectively. *Wurch* agro-ecological zone constitutes only 2.3% of the district. *Dega*, *Woinadega*, *Kola* and *Wurch* are areas located between 2300–3200, 1500–2300, 500–1500 and 3200–3700 m above sea level respectively (Hurni, 1998). Its average annual temperature ranges between 16° and 25° and rainfall of above 1000 mm (Quarit District Administrative Office, 2015). The district is part of the resource-poor and food-insecure areas (Teshome, 2010), even if it is not yet designated as food insecure by the Amhara regional government.

¹ *Kebele* is the lowest administrative unit next to district in Ethiopia.

Research design

The study employed a mixed-method research approach. Among the different types of this approach, the sequential embedded mixed method was employed which uses one type of data to provide a supportive function in research that is primarily based on other types of data (Creswell, 2012). In our case, the study embeds qualitative data set within the main quantitative data-based study. In a sequential embedded mixed method, the supportive data set can be gathered before and after the collection and analysis of the primary data type of a certain study. Commonly, the supportive data set is first used to understand the research context and participants, and develop survey instruments. Then, they are used to follow up and explain quantitative findings (Creswell, 2012; Creswell & Clark, 2011).

Sampling procedure

The study used a multi-stage sampling involving both purposive and random sampling techniques. As there is no available data at any level of administration about temporary rural–rural labor migration, Quarit district was selected purposely based on information gathered from key informants in West Gojam Zone Administration. Similarly, experts at district level and elders and development agents at *kebele* level were consulted to choose 49 sample villages from four sample *kebeles*. The district as well as sampled *kebeles* and villages were selected as places that host large size migrants with long experiences of temporary rural–rural labor migration. This sampling procedure was employed by other researchers elsewhere (e.g. Regassa & Yusufe, 2009). Focus on locations with large size of migrants and established migration experiences was supportive in securing the required size of migrant-households upon which the main analysis is based. The disadvantage of such sampling is, however, that the sample taken may not represent the average characteristics of temporary rural–rural labor migration in the study district.

Following the selection of locations and developing a sampling frame in line with the types of households (migrant and non-migrant-households), 410 sample households (255 migrant and 155 non-migrant-households)² from a total of 1698 households were selected based on stratified random sampling. Identification of migrant and non-migrant-households involved key informants since there is no recorded official data on the status of migration. Key informants were also consulted to help classify 255 sample migrant-households into one of the three groups of migration: crop farming, full-time and casual wage labor migration. Because of response failure, the final completed questionnaires from migrant-households were 250 (101 crop farming, 96 casual wage labor and 53 full-time wage labor migrant-households). Quite notably, the three types of migrant-households were classified based on the type of occupation migrant-household members participate in at the destination.

² This article is extracted from a larger research project that consider both migrant and non-migrant-households.

Data sources and analysis

Data sources of this article include household survey questionnaires, focus group discussions (FGDs), key informant interviews (KIIs) and secondary sources. Interview questions of the household survey questionnaire were designed based on a 'single-round cross-sectional survey' with some retrospective questioning. Before conducting the household survey, qualitative data were collected to get preliminary information to clearly understand the dynamics of migration and develop data collection instruments. Then, the actual household survey was conducted and followed by the collection of qualitative data through focus group discussions, key informant interviews and secondary data sources.

The FGDs with migrants comprised six focus groups (two from each type of migration) with 6–12 participants. KIIs involved purposely selected four elders (one from each *kebele*) and 15 purposely selected experts from five relevant offices: Agriculture, Health, Ethiopian Commodity Exchange (ECX), Labor and Social Affairs and Police. All key informants were recruited based on their potential to provide the required information.

The study used two key sequentially linked data related to shocks to investigate how and the extent to which vulnerability of temporary labor migrants at the destination is translocalized to shape the vulnerability of migrant-sending households. The first focused on whether migrant-households were exposed to shock (s) that occur at the destination over the years through their participation in temporary rural–rural labor migration. The second considered how and to what magnitude exposure to the shock (s) was responsible in making migrant-households' vulnerable seen in terms of asset decumulation and food insecurity. These two dimensions of household livelihood vulnerability were selected because they are the key concerns of the households often either enhanced or hampered by migration. To that end, the shock experienced migrant-households were asked questions containing five indicators of food insecurity and four indicators of asset decumulation.

The food insecurity measuring items were adopted from the food insecurity scale (Hadley et al., 2008; Maxwell et al., 1999). These include: worrying about having enough food, being unable to eat the preferred food, not taking enough food, asking for money and/or food outside home and going without eating. For asset decumulation, considering the local context and taking into account the key concerns of migrant-households, the following indicators were identified: depletion of cash savings, indebtedness, degradation of livestock holdings and reduction of labor productivity and availability.

Each indicator has four-point scales (4-high, 3-moderate, 2-low and 1-no impact) in identifying the degree to which shocks of any kind at the destination have ever been causing a household to suffer from food insecurity and asset decumulation. In the case of food security, the five indicators were given varying weight in terms of the severity of food insecurity challenges as identified in focus group discussions. Indicators 1 and 2 were weighed as 1, indicators 3 and 4 as 2 and indicator 5 as 3. Unlike food insecurity indicators, however, equal weight is assigned to each asset decumulation measuring item because of the difficulty in providing different weights.

For analysis, households' responses to items were summed considering the perceived severity and weight given to each food security and asset decumulation indicator. Then, households' levels of food insecurity and asset decumulation were changed into terciles

Table 1 Demographic and socio-economic characteristics of migrants. *Source:* Own Household Survey (2015)

| | <i>F</i> | <i>%</i> | | <i>f</i> | <i>%</i> |
|---------------------|----------|----------|--|----------|----------|
| Sex | | | <i>Types of occupation at the origin</i> | | |
| Male | 288 | 74.2 | Farming (own/family) | 348 | 89.7 |
| Female | 100 | 25.8 | Attending schools/students | 21 | 5.4 |
| Total | 388 | 100 | Job Seeking | 12 | 3.1 |
| <i>Education</i> | | | Others | 7 | 1.8 |
| Illiterate | 114 | 29.4 | Total | 388 | 100 |
| Read and write | 34 | 8.8 | <i>Type of occupation at destination</i> | | |
| primary education | 188 | 48.4 | Crop farming | 178 | 45.9 |
| Secondary education | 47 | 12.1 | Casual wage labor | 1.3 | 30.7 |
| Above secondary | 5 | 1.3 | Full-time wage labor | 91 | 23.5 |
| Total | 388 | 100 | Total | 388 | 100 |

*HH household head

(three equal levels/parts) (Hadley et al., 2008): least, moderately and highly vulnerable. The Chi-square test was used to see whether there was any significant variation in the level of translocal vulnerability to food insecurity and asset decumulation among the three groups of migrant- households. The Chi-square test was also utilized to investigate if there were differences in food insecurity status and exposure to shocks across types of migrant-households. A one-way ANOVA was used to examine whether there was a statistically significant variation in asset ownership among the three categories of migrant-sending households.

Socio-economic profiles of migrants

The household survey results find 388 migrants from 250 migrant sending households included in the sample. This section considers the socio-economic characteristics of these migrants including the nature of their occupation at the destination (see Table 1). The results reveal that the majority of migrants are male (74%), implying a gender role in participating in temporary rural–rural labor migration. The lower proportion of female migrants may be due to: (1) the responsibility of women at the origin to manage domestic activities including child care; and (2) the risky and laborious nature of jobs at the destination might be seen as a male activity. The average age of migrants is 25 years (not documented here). This shows that most migrants are energetic to cope with the hurdles of environmental and socio-economic situations at the destination.

At the time of their last migration, the highest share of migrants (48%) had completed primary education followed by those who were illiterate (29%). In aggregate terms, primary and above educational levels constitute about 60% of migrants. However, it is important to note that rural–rural migration meant for agricultural jobs does not necessarily require potential migrants to attain a higher level of education.

The primary occupation of the majority of migrants at the origin is dominated by farming (90%) reflecting rural Ethiopia where the majority of the population depends on agriculture. Students constitute 5% of migrants that tend to embark on migration to exploit casual wage labor employment opportunities when the annual educational calendar comes to recess.

The occupations of migrants at the destination assume three major employment categories: crop farming, casual wage labor and full-time wage labor. Crop farming employs the majority of migrants (46%), whereas full-time wage labor makes up the smallest number of migrants (24%). In aggregate terms, slightly more than half of the migrants (54%) work for wages (either as casual or full-time wage laborers).

Crop farming migrants

As the name indicates, the primary occupation of this group of migrants is crop farming. The FGDs with crop farming migrants reveal that except for some partial engagement in the production of pepper, sorghum, groundnuts and soya bean, depending on the agro-ecology at the destination, crop farming migrants primarily engage in the production of sesame (*Sesamun indicum L.*) (locally called *selit*) due to its emergence as an important high-value global cash crop. Currently, it is a leading agricultural export product in Ethiopia next to coffee (FAO, 2015).

The same FGDs indicate that the sources of land for temporary migrant farmers comprise residents, settlers, investors, migrants and free access through clearing forests. What is more, informants mention two basic terms of agreement with land owners through which they commonly try to access land: renting and sharecropping. The former involves paying agreed-upon money in cash for a specific land size for a defined period of time usually for one growing season, while the latter allows migrant farmers to access land through a contract that requires in-kind payment (crop products) to the landowner.

Full-time wage labor migrants (kenja)

The term *kenja* refers to working as wage laborers where migrants are hired on a contractual basis to perform specified agricultural and/or non-agricultural activities for certain months or one growing season. As FGDs with full-time labor migrants reveal, potential employers of this group of migrants are migrant farmers, residents, settlers and investors. They are largely employed for one cropping season usually starting from land clearing to the threshing period. The same informants state that the forms and amounts of payment for *kenjas* are different across destinations and times. Variation is also observed between males and females in terms of the nature of work for which they are employed and forms of payment for their labor. Land preparation, weeding, harvesting and threshing are the most common agricultural activities for men. Females, on the other hand, mostly engage in domestic work as housemaids.

It is further noted that the modalities of payment of male and female laborers occur both in cash and in-kind. Males are mainly employed for in-kind payment, whereas females are largely employed for in-cash payment. During the 2014/2015 cropping season, the payment in cash ranged from Birr 6000 to 8000 for males and Birr 4000 to 7000 for females for one cropping season. Fixed in-kind payments ranged from 2 to 4 quintals for females and 3 to 6 quintals for males. The FGDs made it apparent that employers provide food for these types of migrants.

Table 2 Source of finance during last migration across types of migrants. *Source:* Own Household Survey (2015)

| Source of finance for migration | Types of migrants | | | | Sig |
|---|---------------------------------|--------------------------------------|--|------------|------|
| | Crop farming migrants (n = 178) | Casual wage labor migrants (n = 119) | Full-time wage labor migrants (n = 91) | Total | |
| Private money lenders, credit and saving institutions and churches (% of yes) | 85 (47.8) | 51 (42.9) | 32 (35.2) | 168 (43.3) | 0.14 |
| Household cash saving (% of yes) | 99 (55.6) | 37 (31.1) | 22 (24.2) | 158 (40.7) | 0.00 |
| Selling asset (% of yes) | 64 (36) | 25 (21) | 23 (25.3) | 112 (28.9) | 0.01 |
| Borrowed from relatives/friends (% of yes) | 28 (15.7) | 22 (18.5) | 17 (18.7) | 67 (17.3) | 0.76 |

Table 3 Regional level destinations of migrants during their last migration. *Source:* Own Household Survey (2015)

| Regional level destination | f | % |
|----------------------------|-----|------|
| Amhara | 257 | 66.2 |
| Benishangul Gumuz | 81 | 20.9 |
| Oromia | 37 | 9.5 |
| Others | 13 | 3.4 |
| Total | 388 | 100 |

Casual wage labor (shekil) migrants

This group of migrants embarks on migration to find temporary casual wage labor during land preparation, clearing farmlands, weeding and harvesting seasons, primarily in sesame, sorghum and cotton-growing areas, though there are some opportunities in *teff* (*Eragrostis tef*), maize and coffee growing areas. The FGDs with casual wage labor migrants and KIIs with experts in Labor and Social Affairs Offices (LaSAOs) show that weeding and harvesting activities of sesame are key sources of employment opportunities. The weeding season begins in June and lasts until September. Sesame harvesting, on the other hand, occurs primarily in the months of September and October.

The reported potential employers for casual wage labor migrants include residents, settlers, migrant farmers, investors and those who produce crops by renting land from investors. Investors are said to be the major large-scale employers. Potential employers hire migrants in surrounding urban areas where wage laborers gather. Migrants also directly go to the employers' labor camp with or without prior notice. During the engagement period, employers provide food and shelter to casual wage laborers.

It is also revealed by the same FGDs that payment of casual wage labor migrants during weeding season is based mostly on the size of land a migrant or a group of migrants sub-contracted to weed for a certain amount of payment in return. In harvesting time, the mode of payment is mostly in *hilla*, which is equal to 400 handful bundles of sesame. Since sesame has a very short harvesting period, casual wage labor migrants tend to engage in harvesting even at night by hanging hand torches on their heads.

Concerning sources of finance to migration, Table 2 demonstrates that migration finance does not depend on one source. Borrowing from private money lenders, saving institutions and churches are the most common sources of finance (43%) followed by

Table 4 Months of stay away from the place of origin across types of migrants. *Source:* Own Household Survey (2015)

| Types of migrants | Months of stay away from origin | | | | Total |
|-------------------------------|---------------------------------|-----------|------------|----------|-----------|
| | 1–3 | 4–6 | 7–9 | 10–12 | |
| Crop farming migrants | 3 (1.7) | 48 (27) | 116 (65.2) | 11 (6.2) | 178 (100) |
| Casual wage labor migrants | 84 (70.6) | 23 (19.3) | 9 (7.6) | 3 (2.5) | 119 (100) |
| Full-time wage labor migrants | 6 (6.6) | 25 (27.5) | 51 (56) | 9 (9.9) | 91 (100) |
| Total | 93 (24) | 96 (24.7) | 176 (45.4) | 23 (5.9) | 388 (100) |

household savings (41%), selling the asset (29%) and borrowing from relatives/friends (17%). Crop farming migrants significantly dominate other types of migrants in terms of using household savings ($P < 0.01$) and selling household assets ($P < 0.05$) which could be due to the capital intensive nature of crop farming that forces them to rely on these sources of finance more than other types of migrants.

Patterns of migration

Spatial patterns of migration

Table 3 shows the place of destinations of migrants by region. The destinations are diverse, covering more than three regions out of eleven regions of Ethiopia. Although migration destinations vary, the spatial pattern of migration is predominantly intra-regional (within the Amhara region), accounting for 66% of migrants' destinations. From inter-regional destinations, the Benishangul Gumuz region has the highest share (21%) followed by the Oromia region (10%). Other inter-regional destinations comprise only 3.3% of the total migrants.

There are three possible explanations for the dominance of intra-regional migration. The first explanation could have much to do with ethnic-based system of administration of the government that possibly results in sporadic inter-ethnic conflict between Amhara migrants and other ethnic groups in Benishangul Gumuz, SNNP, and Oromia regions at different times. This situation could serve as a lesson for potential migrants to avoid inter-regional migration. The second explanation could be migrants' linguistic and cultural differences from people of other regions discourage them to engage in inter-regional migration. The last reason is related to the cost of migration which may be higher in inter-regional than intra-regional migration.

Temporal patterns of migration

Migrants spend an average of 7.5 months away from home (not listed in the Table). The majority of migrants (45%) stay away for 7–9 months. Disaggregated data by types of migrants, however, reveal significant variation. The majority of crop farming migrants (65%) leave for 7–9 months followed by those who leave for 4–6 months (27%). Similarly, the majority of full-time wage labor migrants stay away for 7–9 months (56%) and 4–6 months (28%) (Table 4).

Table 5 Ownership of key assets and level of food insecurity status across types of migrant-households. *Source:* Own Household Survey (2015)

| | Types of households | | | | | | | | Sig |
|--|---------------------|------|------------------------|------|---------------------------|------|------------|------|------|
| | Crop farming MHHs* | | Casual wage labor MHHs | | Full-time wage labor MHHs | | Total | | |
| | Mean | SD | Mean | SD | Mean | SD | Mean | SD | |
| <i>Assets ownership</i> | | | | | | | | | |
| Size of Adult labor | 4.32 | 1.59 | 3.43 | 1.49 | 4.15 | 1.47 | 3.94 | 1.57 | 0.00 |
| Size of Land holding | 1.05 | .41 | .66 | .44 | .88 | .42 | .87 | .46 | 0.00 |
| Size of livestock holding | 3.54 | 2.09 | 2.37 | 1.59 | 2.93 | 2.13 | 2.96 | 1.88 | 0.00 |
| <i>Level of food insecurity status</i> | | | | | | | | | |
| Least food insecure | 81 (80.2) | | 39 (40.6) | | 37 (69.8) | | 157 (62.5) | | 0.00 |
| Moderately food insecure | 12 (11.9) | | 35 (36.5) | | 11 (20.8) | | 58 (23.2) | | |
| Severely food insecure | 8 (7.9) | | 22 (22.9) | | 5 (9.4) | | 35 (14) | | |
| Total | 101 (100) | | 96 (100) | | 53 (100) | | 250 (100) | | |

Figures in parenthesis are percentages

*MHHs Migrant-households

Thus, full-time wage labor and crop farming migrants stay away from home almost for the same number of months. On the other hand, the overwhelming majority of casual wage labor migrants (71%) stay at their destination only for 1–3 months. The schedule of migration also varies across types of migrants and even within the same type of migrants, especially among crop farming migrants. Elders reflect that the schedule of migration among crop farming migrants is largely dependent upon different factors such as the proximity of the place of destination to the origin and whether migrants have already managed to secure land at the destination. The following sections address household-level concerns that are important to this study.

Ownership of key livelihood assets and food security status of households

Ownership of key livelihood assets: labor, land and livestock

Migrant-households have on average 3.94 adults. Crop farming migrant-households have significantly larger size of adults (4.32) than full-time wage labor migrant (4.15) and casual wage labor migrant (3.43) households ($P < 0.01$) (Table 5). As noted above, the majority of full-time wage labor and crop farming migrants spend more time outside their home and thus are less likely to participate in some key peak seasons in home agriculture. This indicates that they have adequate adult labor available for both agricultural activities at the origin and temporary labor migration.

The average landholding size of all survey migrant-households is 0.87 hectares (Table 5). This is lower than the national (1.06 hectares) and regional (1.16 hectares) averages (CSA, 2016) reflecting serious land scarcity. There is significant variation among types of migrant-households. Crop farming migrant-households owned more land (1.05 hectares) than full-time wage labor migrant (0.88 hectares) and casual wage labor migrant (0.66 hectares) households ($P < 0.01$).

The average livestock holding size of survey migrant-households is 2.96 TLU. This is lower than the national and regional averages of 3.61 and 3.64, respectively (CSA, 2016).

Table 6 Destination-induced shock exposure across types of migrant-households. *Source:* Own Household Survey (2015)

| Types of shocks | Types of migrant-households | | | Total | x ² test |
|-------------------------|------------------------------|---------------------------------|------------------------------------|------------|---------------------|
| | Crop farming MHHs* (n = 101) | Casual wage labor MHHs (n = 83) | Full-time wage labor MHHs (n = 45) | | |
| Over all shock exposure | 101 (100) | 83 (86.5) | 45 (84.9) | 229 (91.6) | 0.00 |
| Crop failure | 88 (87.1) | – | 19 (35.8) | 107 (42.8) | 0.00 |
| Market shock | 101 (100) | – | 24 (45.3) | 125 (50) | 0.00 |
| Health shocks | 80 (79.2) | 69 (83.1) | 34 (75.6) | 183 (79.9) | 0.58 |
| Employment shock | 23 (22.8) | 47 (56.6) | 15 (33.3) | 85 (37.1) | 0.00 |
| Crime | 27 (26.7) | 45 (54.2) | 18 (40) | 90 (39.3) | 0.00 |

Figures in parenthesis are percentages

*MHHs Migrant-households

Crop farming migrant-households (3.54) have slightly more livestock than full-time (2.93) and casual (2.37) labor migrant-households ($P < 0.01$) (Table 5).

The findings show that migrant-households have small land and livestock holding size. In terms of the three essential household livelihood assets (labor, land and livestock), casual wage labor migrant-households are worse off and crop farming migrant-households are better off.

Food security status

During the previous 12 months prior to the survey, the majority of migrant-households (63%) were least food insecure. More of casual wage labor migrant-households are food insecure (moderately vulnerable: 37% and highly vulnerable: 23%) than households with full-time (moderately vulnerable: 21% and highly vulnerable: 9%) and crop farming migrants (moderately vulnerable: 12% and highly vulnerable: 8%) ($P < 0.01$) (Table 5). The higher level of vulnerability to food insecurity among casual wage labor migrant-households could be related to their poor endowment of key livelihood assets because ownership of assets such as land and livestock defines the poverty status of rural households in Ethiopia and is more likely to make this group of migrants vulnerable to food insecurity.

The role of migration for asset accumulation and food security

The FGDs with various types of migrants indicate the multiple ways by which migration contributes to asset accumulation and food security of migrant-households. First, migration supports asset accumulation by allowing households to save money, buy livestock, and build and renovate houses. Casual wage labor migration is regarded as important to buy livestock and build and renovate houses. Although these advantages of migration are mentioned in all FGDs, full-time wage labor migrants reveal in FGDs that migration is also taken as a key way to save money for future investment in cash crop farming. Crop farming migrants' FGDs also disclose that migration for crop farming is a remunerative type of migration especially in times of conducive weather conditions and paying market price of sesame.

Second, migration brings opportunities migrant sending-households would not be able to obtain at the origin to purchase food and non-food items. Third, it supports the livelihoods of households by reducing the number of mouths they are expected to feed. For instance, FGD participants from full-time migrants disclose that without migration, it would be impossible for households to get a space where household members can stand, let alone be able to get a viable land size to lead decent livelihoods. Finally, it is noted during all FGDs that migration indirectly supports households' food security and asset accumulation by influencing the production side of crop farming by providing the opportunity to generate income to buy artificial fertilizer and farm oxen.

Generally, the results indicate that temporary rural–rural labor migration provides means of taking available opportunities at the destination while maintaining households' livelihood activities at the origin. However, to ensure such opportunities, migrant-households are expected to be free from exposure to adverse shocks occurring at the destination. Practically, however, temporary rural–rural migrants are exposed to multiple shocks at the destination (see Linger & Terefe, 2018).

Destination-induced shock exposure of migrant sending households

Over the years of engaging in temporary rural–rural labor migration, about 92% of migrant-households are exposed to one or more shocks that occur at the destination regardless of the severity, frequency and nature of shocks (Table 6). Comparison among different types of migrant-households shows that crop farming migrant-households (100%) are more vulnerable to shocks than both casual wage labor migrant (87%) and full-time migrant (85%) households ($P < 0.01$). Individual shock distribution appears to vary by sub-group of migrant-households. Crop failure affects 43% of households from both crop farming and full-time wage labor migrant-households. Disaggregated data show a striking difference. The overwhelming majority of crop farming migrant-households (87%) report crop failure while just 36% of full-time wage labor migrant-households report this shock. This difference is found to be statistically significant ($P < 0.01$). When asked about the causes of crop failure, FGDs with crop farming migrants and KIIs with agricultural experts reveal that crop failure is mostly due to rainfall variability, which is enforced by the fact that Ethiopian sesame shatters when it gets dry. When sesame crops are exposed to heavy rain during the ripening stage, sesame pods shatter and result in a loss of yield. In this regard, FGDs with crop farming migrants pointed out the 2014/15 cropping season as a typical example. Although they invested a lot in sesame farming during this season, untimely heavy rain damaged the crop that forced them to come back home at a loss.

Market shocks are reported by 50% of migrant-households with a statistically significant difference between crop farming (100%) and full-time migrant-households (45%) ($P < 0.01$). This group of full-time migrant-households constitutes those whose income is based on in-kind payments that tend to be under the influence of crop failure and market shock. KIIs with experts in ECX offices indicate that the key factor behind the market shock is related to the fact that sesame price is dictated by the international market where the Ethiopian government in general and migrants in particular have no power to control.

The majority (80%) of respondents from all classes of migrant-households are exposed to health shocks. Specifically, health shocks affect 83% of casual wage labor migrant-households compared to 79% of crop farming migrant-households and 76% of full-time wage labor migrant-households. But this difference is not statistically significant ($P > 0.05$). Health experts note that the common sources of health shocks are malaria, diarrhea, typhoid, typhus and anemia. They relate migrants' vulnerability to health shocks to ill-equipped living and working conditions characterized by lack of health facilities, poor transportation services and poor diet coupled with migrants' unhealthy coping strategies such as buying and taking medicine without medical examination (that create shocks by themselves) due to lack of accessible health services. Health experts further disclose that although investors are required to provide several necessary health-related facilities to casual wage labor migrants, there is little enforcement of these requirements by concerned government bodies causing casual wage labor migrants exposed to preventable health shocks.

Employment shocks, which are experienced by 37% of migrant-households, appeared to be more prevalent among casual wage labor migrant-households (57%) than crop farming migrant (23%) and full-time migrant (33%) households ($P < 0.01$). The FGDs with all sub-groups of migrants and KIIs with experts in LaSAOs indicate the lack of labor information for the existing employment opportunities at the destination as the primary reason for employment shock. During FGDs, casual wage labor migrants reflect that sometimes they arrive at the destinations after available job opportunities are saturated. Being unemployed and struggling to get alternative job opportunities are shared experiences of this group of migrants.

Casual wage labor migrant-households also dominated others in crime shocks. While 54% of casual wage labor migrant-households are exposed to crime shock, only 40% and 27% of full-time wage labor and crop farming migrant-households respectively experience this shock ($P < 0.05$). The data gathered from various FGDs and police officers indicate that crime shocks are associated with an attack by a group of casual laborers known as *saluges* which is common in the North Gondar zone of the Amhara region. *Saluges* are early migrants who have been accustomed to the hot climate and way of life of lowland areas (migrant destination) and take the lowlands as their home (Linger, 2018; Tsegaye, 2016). They are alleged to have little contact with their families at the origin (Linger, 2018). Police officers further claim that migrants are vulnerable to crimes as the result of their migration to areas where legal protections are low.

Table 6 generally demonstrates the fact that migrant-households are exposed to multiple shocks that occur at the destination. It appears that vulnerability at the destination has much to do with limited institutional support to migration-related livelihoods. Ethiopia has no comprehensive migration policy. Policy environments of the country in general look less responsive to migration (IOM, 2017). For instance, the development plans of the current government such as Plan for Accelerated and Sustained Development to End Poverty (Federal Democratic Republic of Ethiopia [FDRE], 2006), Growth and

Table 7 Level of vulnerability to asset decumulation across and food insecurity across types of migrant-households. *Source:* Own Household Survey (2015)

| Type of vulnerability | Levels of Vulnerability | Types of migrant-households | | | Total | Sig |
|-------------------------------------|-------------------------|-----------------------------|------------------------|---------------------------|------------|------|
| | | Crop farming MHHs* | Casual wage labor MHHs | Full-time wage labor MHHs | | |
| Vulnerability to asset decumulation | Least vulnerable | 21 (20.8) | 50 (61) | 34 (75.6) | 105 (46.1) | 0.00 |
| | Moderately vulnerable | 42 (41.6) | 23 (28) | 7 (15.6) | 72 (31.6) | |
| | Highly vulnerable | 38 (37.6) | 9 (11) | 4 (8.9) | 51 (22.4) | |
| | Total | 101 (100) | 82 (100) | 45 (100) | 228 (100) | |
| Vulnerability to food insecurity | Least vulnerable | 85 (84.2) | 51 (61.4) | 36 (80) | 172 (75.1) | 0.00 |
| | Moderately vulnerable | 10 (9.9) | 21 (25.3) | 6 (13.3) | 37 (16.2) | |
| | Highly vulnerable | 6 (5.9) | 11 (13.3) | 3 (6.7) | 20 (8.7) | |
| | Total | 101 (100) | 83 (100) | 45 (100) | 229 (100) | |

Figures in parenthesis are percentages

*MHH Migrant-households

Transformation Plan I (FDRE, 2010) and Growth and Transformation Plan II (FDRE, 2015) distance themselves from addressing the internal migration issues of the country. Data from FGDs with all groups of migrants show that little or no institutional support system is in place to help the victims of migration-induced shocks or little institutional support to the type of economic activity that migrants engage in at the destination. For example, beyond the lack of social security system to address their exposure to shocks, FGDs with crop farming migrants attest that they are regarded by locals and government officials at the destination as ‘illegal settlers’. There is a fear among this group of migrants particularly those inter-regional migrants that conflict could arise at any time and force them to leave the place before harvesting their crops.

Translocal vulnerability to asset decumulation and food insecurity

Vulnerability to asset decumulation

Migrant-households’ self-evaluation of asset decumulation outcomes of their exposure to destination-induced shocks shows that more than half of migrant-households (54%) face moderate (32%) and severe (22%) levels of asset decumulation (Table 7). There is a notable difference across types of migrant-households ($P < 0.01$). The majority of crop farming migrant-households are subjected to moderate (42%) to severe (38%) asset decumulation. On the other hand, full-time wage labor migrant-households are the least vulnerable (moderately vulnerable: 16% and severely vulnerable: 9%). This latter case may be related to their limited financial capital investment on migration as most of their financial costs of migration including food during the period of engagement at the destination are covered by employers.

Conversely, the highest level of asset decumulation among crop farming migrant-households is related to the most expensive and vulnerable nature of crop farming at the destination itself. As noted during FGDs with crop farming migrants, crop farming requires high startup capital which is financed by households’ savings (if any) or through the sale of livestock or taking loans. It is alluded by the same FGDs that although

migration for crop farming is assumed to be remunerative during normal agricultural and market price conditions, it turns devastating when the two go wrong.

As crop farming migrants further revealed in the FGDs, substantial crop failure and market shocks that occurred during the previous year left them to lose their investment so that they remain unable to replace the asset they sold and repay the money they borrowed to cover the cost of investment. They also mention that the only way they can get out of debt is by looking for other money lenders. If they initially borrow money from Amhara Credit and Saving Institution (ACSI), for example, they try to pay off the debt with its high-interest rate by borrowing from private money lenders. When the time comes to repay the loans obtained from private money lenders, they again borrow money from ACSI. This continues until they manage to free themselves from such perpetual indebtedness. This is how migrant-households degrade their asset as the result of their exposure to shock at the destination.

Although asset decumulation is highly pronounced among crop farming migrant-households, FGDs organized from all categories of migrants indicate the various ways by which shocks at the destination lead to asset decumulation. Exposure of migrants to health shocks, for instance, limits labor capacity of migrant sending-households. Similarly, health, employment and crime shocks drain the chance of migrant-sending households to generate income. The FGDs further disclose that these shocks put pressure on households to sell their assets or borrow money for medication or to buy food and non-food items, resulting in indebtedness and asset depletion.

Vulnerability to food insecurity

Table 7 shows that most households (75%) are least vulnerable to food insecurity. This suggests that migrants' exposure to shocks at the destination does not necessarily result in food insecurity in migrant-sending households. A significant difference is still observed in the level of vulnerability among the three types of migrant-households. Food insecurity affects more casual wage labor migrant-households (moderately vulnerable: 25% and highly vulnerable: 13%) than full-time wage labor migrant (moderately vulnerable: 13% and highly vulnerable: 7%) and crop farming migrant (moderately vulnerable: 10% and highly vulnerable: 6%) households ($P < 0.01$).

In the course of all FGDs, it is revealed that there are diverse ways by which shocks at the destination contribute to food insecurity. They make households: (1) be unable to get income to purchase food and non-food items; (2) be unable to pay back loans, leading to further indebtedness and compromising food consumption; (3) be forced to seek loans from money lenders to buy food and non-food items; (4) sell food reserves to get cash; and (5) limit the investment of inputs (labor, cash, and land) for food production. FGDs with casual wage labor migrants, for example, reveal that their households cannot survive without migration but migration-related income is unreliable. Sometimes, migrants return home with serious illnesses and/or little money. They use the money earned to cover medical expenses. At times, let alone making money that can support food purchases, they take a loan and/or are compelled to sell assets and food reserves to cover medical costs.

However, as reflected in the FGDs with all groups of migrants, there are ways by which exposure to shocks at the destination can be reinforced by shocks at the origin and put the food security of households at risk. For example, sometimes migration-related shocks at the destination (such as health shocks) can reduce available labor for agricultural activities at the origin, contributing to a decline in food production. Likewise, to use household labor for better opportunities at the destination, some households send more migrants by leaving agricultural activities at the origin to women, the old and children or by renting out/sharecrop land with others that could compromise with the food security of households. In such circumstances, the convergence of migration-induced vulnerabilities, both at the origin and destination, can worsen household food insecurity.

Discussion

The article divulges that despite the differences among types of migrant-households, shocks at the destination have a negative impact on the asset base and/or food security status of households. The fact that migrant-households are trapped in a vicious circle of indebtedness and erosion of assets in their attempt to repay loans reflects vulnerabilities of migrant-households are worsened by a lack of well-established financial system at the origin. Evidence elsewhere (Islam & Herbeck, 2013) proves the case where households take loans to cover the cost of migration, but migrants' failure to send money to their households leads to new borrowing meant to smooth consumption and ultimately forced them to sell their assets to pay off debt.

The fact that casual wage labor migrant-households are more vulnerable to food insecurity could be due to their poor land and livestock holdings, which can turn slight shock exposure into major food insecurity situation. As shown elsewhere, food insecurity outcomes of shocks could be bounced back by households' asset endowment (Castell et al., 2015) even if there remain some consequences. In other words, crop farming and full-time migrant-households could degrade their asset without becoming food insecure. In this regard, the 2008 food crisis in Ethiopia had created differential impacts on household food insecurity because wealthier households coped better with the increase in food prices than their poorer counterparts (Hadley et al., 2011). The lower level of food insecurity among crop farming and full-time wage labor migrant-households might also be related to the frequency, nature and severity of shocks, which were not considered in this study rather than simple exposure to shocks.

Although the findings do not allege that most migrant-households were subjected to shock driven vulnerability to food insecurity, it is logical to assume that a higher level of asset decumulation may impose repercussions on the food security status of migrant-households for the reason that food insecurity and asset decumulation are intrinsically related (Casale et al., 2010). The data reveal that shocks at the destination cause migrant-households to erode their livestock assets and saving, and borrow money to smooth consumption. Even though such asset decumulation meant to smooth consumption does not necessarily lead to food insecurity for a while, it can create a long-term food insecurity feedback effect. Thus, it is important to take an integrated view of the two negative livelihood outcomes.

It is also worth noting that temporary shock exposure of migrants can have lasting effects on the vulnerability of households. Empirical evidence in Ethiopia shows that an

increase in consumption was significantly lower among households who endured considerable suffering during the 1984/85 famine episode as compared to other households (Dercon, 2004). Such evidence is a typical reflection of how severe but temporary shocks drag households into lasting livelihood insecurity.

The evolving argument is that the livelihood vulnerability of migrant-sending households is embedded in the vulnerability context of places of destination mediated by migration. This is a reflection of translocal vulnerability, which describes how the vulnerability is shaped by not only local factors, a focus of conventional development intervention but also by the networked relationships with multi-place factors. Other sources render support to the argument (Hagen-Zanker et al., 2014; Nunan, 2010; Steinbrink & Niedenführ, 2020).

Part of the problems associated with migrant-households' vulnerability to food insecurity and asset decumulation is that there is no formal social protection related to migration-induced shocks. It is widely argued that households' vulnerability to declining livelihood security depends not only on asset endowment or severity and frequency of the shocks but also on insurance mechanisms (Casale et al., 2010). Indeed, depletion of household assets and the resulting fall in consumption due to lack of insurance during events of severe shock no doubt lead to poverty (Dercon, 2006). In line with this, it is possible to argue that the vulnerability of migrants and their households has much to do with the lack of institutional support for migration. In this regard, Deshingkar and Grimm (2004) argues that a pessimistic attitude toward migration has an impact on political will to protect the right of migrants for decent work and reduce migration-related vulnerabilities. Generally, dependence on vulnerable livelihood activity at the destination, migrant-households' limited coping capacity and lack of institutional support together could transform shocks that migrants face at the destination into long-term negative livelihood outcomes on migrant-sending households.

Conclusion

The article offers useful information on the links migrant-households establish with vulnerable places at the destination to reduce their vulnerability can further impoverish households. This context, arguably, shows how migration changes the geography of vulnerability. This understanding extends the single-cited (place bounded) perspective of vulnerability to shock with policy implications for other distant places. Accordingly, it is less likely to be a fruitful approach to conceive vulnerability to shock by confining to local ways of getting things done.

We argue here that temporary rural–rural labor migration is an unreliable households' livelihood strategy since activities at the destination are informal, less protected and risk-prone. Based on the empirical findings of the study, it is contended that finding a solution to migration-related vulnerability requires recognizing the problem of migrants' exposure to shocks at the destination and there is a political will to address the problem. Therefore, informed deliberate policy actions are important for the effective reduction and prevention of migration-related shocks and maximize the benefits. It is critical to emphasize, however, that the one-size-fits-all kind of approach does not work towards all forms of migration as sources and outcomes of shocks vary among types of migration.

The present study contends that social protection policies are needed to better support households' preparedness for and responses to shocks in better ways. Social protection needs to encompass both ex-ante risk reduction and ex-post risk management activities. Ex-ante measures include assisting individuals and households to be resilient to shocks. Ex-post responses to manage vulnerability include providing assistance to affected households and planning measures in the event of shocks through policy intervention. If individuals and households are unable to cope with shocks on their own, public intervention becomes an apparent option.

As the two different rural agricultural spaces (origin and destination) are integrated in livelihood vulnerability, addressing the situation in both spatial domains is inevitable to manage vulnerability. This implies that spatial-oriented development endeavors shall deserve attention instead of the traditional boundary-based development policy formulation and implementation alone. Thus, effective interventions through intra-regional and inter-regional cooperation in the management of migration are important. This includes promoting the exchange of information between the administrative bodies of migrants' place of origin and destination, establishing duties and responsibilities among them, and supporting and coordinating stakeholders to work together on the issues of labor market information, risk management, etc.

Acknowledgements

We would like to thank the Association of African Universities for the financial support it provided to the larger research from which this research is extracted. We also like to appreciate the supports of Abel Markos, Andargachew Getu and Mesfin Desiye to improve the quality of the article.

Author contributions

The corresponding author contributed in data collection, entry, organization and analysis, while the second author contributed in data organization and analysis. Both authors read and approved the final manuscript.

Funding

Not applicable.

Availability of data and materials

Household survey data is available.

Declarations

Competing interests

The authors declare that they have no competing interests.

Received: 2 July 2021 Accepted: 4 July 2022

Published online: 29 July 2022

References

- Brickell, K., & Datta, A. (2011). Introduction translocal geographies. In K. Brickell & A. Datta (Eds.), *Translocal geographies: Spaces, places connections* (pp. 3–22). Ashgate Publishing Limited.
- Casale, M., Drimie, S., Quinlan, T., & Ziervogel, G. (2010). Understanding vulnerability in southern Africa: Comparative findings using a multiple-stressor approach in South Africa and Malawi. *Regional Environmental Change*, 10(2), 157–168.
- Castell, G. S., Rodrigo, C. P., de la Cruz, J. N., & Bartrina, J. A. (2015). Household food insecurity access scale (HFIAS). *Nutricion Hospitalaria*, 31(3), 272–278.
- Central Statistical Authority (CSA). (1991). *The 1984 Population and Housing Census of Ethiopia: analytical report at national level*. Addis Ababa: Author.
- Central Statistical Authority (CSA). (1998). *The 1994 Population and Housing Census of Ethiopia results at Country level (volume I): statistical report*. Addis Ababa: Author.
- Chambers, R. (1989). Editorial introduction: Vulnerability, coping and policy. *IDS Bulletin*, 20(2), 1–7.
- Creswell, J. W. (2012). *Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Edwards Brothers.
- Creswell, J. W., & Clark, V. L. P. (2011). *Designing and conducting mixed methods research* (2nd ed.). SAGE Publications.

- CSA. (2000). *Statistical report on the 1999 national labor force survey*. Author.
- CSA. (2007). *EthioGIS Database*.
- CSA. (2010). *The 2007 population and housing census of Ethiopia results for country level: Statistical report*. Author.
- CSA. (2013). *Population projection of Ethiopia for all regions at woreda level from 2014–2017*. Author.
- CSA. (2016). *Agricultural sample survey, 2013/2015, volume IV: Report on Land utilization*. Author.
- CSA. (2021). *Labor force and migration survey: Key findings*. Author.
- Dame, J. (2018). Food security and translocal livelihoods in high mountains: Evidence from Ladakh, India. *Mountain Research and Development*, 38(4), 310–322.
- de Haan, L. J. (2000). Globalization, localization and sustainable livelihood. *Sociologia Ruralis*, 40(3), 339–365.
- Dercon, S., & Hoddinott, J. (2003). *Health, shocks and poverty persistence*. Discussion. WIDER World Institute for Development Economics Research. Paper No. 2003/08.
- Dercon, S. (2004). Growth and shocks: Evidence from rural Ethiopia. *Journal of Development Economics*, 74(2), 309–329.
- Dercon, S. (2006). Vulnerability: A micro perspective. *Securing Development in an Unstable World*, 30, 117–146.
- Dercon, S., Hoddinott, J., Krishnan, P., & Woldehanna, T. (2008). Collective action and vulnerability: Burial societies in rural Ethiopia. CAPRI Working Paper No. 83. Washington: International Food Policy Research Institute.
- Deshingkar, P., & Grimm, S. (2004). *Voluntary internal migration: An update*. Overseas Development Institute.
- Downing, T. E., Patwardhan, A., Klein, R. J., Mukhala, E., Stephen, L., Winograd, M., & Ziervogel, G. (2005). *Assessing vulnerability for climate adaptation*. Cambridge University Press.
- Etzold, B. (2017). Mobility, space and livelihood trajectories new perspectives on migration, translocality and place-making for livelihood studies. In L. Haan (Ed.), *Livelihoods and development new perspectives* (pp. 44–67). Brill Publication.
- Etzold, B., & Sakdapolrak, P. (2016). Socio-spatialities of vulnerability: Towards a polymorphic perspective in vulnerability research. *DIE ERDE*, 147, 4.
- FAO. (2015). *Analysis of price incentives for sesame seed in Ethiopia for the time period 2005–2012*. Technical notes series, MAFAP. FAO, Rome.
- FDRE. (2006). *Plan for Accelerated and Sustained Development to End Poverty (PASDEP)*, final draft, Addis Ababa.
- FDRE. (2010). *Growth and Transformation Plan (GTP) Draft*. Ministry of Finance and Economic Development (MoFED), Addis Ababa, Ethiopia.
- FDRE. (2015). *The Second Growth and Transformation Plan (GTPII) (2015/16–2019/20) (Draft)*. National Planning Commission. Addis Ababa, Ethiopia.
- Feleke T., Pankhurst, A., Bevan P., & Lavers T (2006). *Migration and rural–urban Link in Ethiopia: Case studies of five rural and two urban sites in Addis Ababa, Amhara, Oromia and SNNP regions and implications for policy and development practice, research group on wellbeing in developing countries, Ethiopia program*. University of Bath.
- Gilles, A. (2015). The social construction of Guangzhou as a translocal trading place. *Journal of Current Chinese Affairs*, 44(4), 17–47.
- Greiner, C. (2009). *Conveyers of social security and risk minimization: Informal migrant networks in Namibia*. Conference Urban–Rural Linkages and Migration September 16th 2009, Workshop Input.
- Hadley, C., Lindstrom, D., Tessema, F., & Belachew, T. (2008). Gender bias in the food insecurity experience of Ethiopian adolescents. *Social Science & Medicine*, 66(2), 427–438.
- Hadley, C., Linzer, D. A., Belachew, T., Mariam, A. G., Tessema, F., & Lindstrom, D. (2011). Household capacities, vulnerabilities and food insecurity: Shifts in food insecurity in urban and rural Ethiopia during the 2008 food crisis. *Social Science & Medicine*, 73(10), 1534–1542.
- Hagen-Zanker, J., Mallett, R., Ghimire, A., Shah, Q. A., Upreti, B., & Abbas, H. (2014). Migration from the margins: mobility, vulnerability and inevitability in mid-western Nepal and north-western Pakistan. *Researching Livelihoods and Services Affected by Conflict*, Report, 5.
- Hurni, H. (1998). *Agro-ecological Belts of Ethiopia: Explanatory notes on three maps at a scale of 1:1,000,000*. Soil Conservation Research Programme.
- IOM. (2017). *National labor migration management assessment: Ethiopia*. IOM.
- Islam, M. M., & Herbeck, J. (2013). Migration and translocal livelihoods of coastal small-scale fishers in Bangladesh. *The Journal of Development Studies*, 49(6), 832–845.
- Lawreniuk, S., & Parsons, L. (2020). *Going nowhere fast: Mobile inequality in the age of translocality*. Oxford University Press.
- Linger, A. (2018). *Temporary Rural–rural Migration, Vulnerability of Migrants at the Destination and Its Outcomes on Migrant-households: Evidence from Temporary Migrant Sending Households in Quarit District, Northwestern Ethiopia* (Doctoral dissertation), College of Development Studies, Addis Ababa University.
- Linger, A., & Terefe, D. (2018). Vulnerabilities of migrants at destination: The case of temporary rural–rural labor migrants from Quarit District, West Gojjam Zone of Amhara Region, Ethiopia. *Ethiopian Journal of Development Research*, 40(2), 51–78.
- Lohnert, B., & Steinbrink, M. (2005). Rural and urban livelihoods: A translocal perspective in a South African context. *South African Geographical Journal*, 87(2), 95–103.
- Lucas, R. E. (2015). *Internal migration in developing economies: An overview*. KNOMAD Working Paper 6, global knowledge partnership on migration and development. World Bank, Washington, DC.
- Markos, E. (2003). Environmental vulnerability, rural poverty, and migration in Ethiopia: A contextual analysis. *Genus*, 59, 63–91.
- Maxwell, D., Ahiadeke, C., Levin, C., Armar-Klemesu, M., Zakariah, S., & Lamprey, G. M. (1999). Alternative food-security indicators: Revisiting the frequency and severity of coping strategies. *Food Policy*, 24(4), 411–429.
- McSweeney, K. (2004). The dugout canoe trade in Central America's Mosquitia: Approaching rural livelihoods through systems of exchange. *Annals of the association of American Geographers*, 94(3), 638–661.
- Nunan, F. (2010). Mobility and fisherfolk livelihoods on Lake Victoria: Implications for vulnerability and risk. *Geoforum*, 41(5), 776–785.

- Pankhurst, A., Mengistu, D., Valerie, M., & Maji, H. (2013). In D. Rrehamato, A. Pankhurst & J. van Uffelen (Eds), *Migration and Resettlement: Reflection on Trends and Implication for Food Security, in Food Security, Safety Nets and Social Protection in Ethiopia*. Addis Ababa: FSSH.
- Paul, S. K. (2014). Vulnerability concepts and its application in various fields: a review on geographical perspective. *Journal of Life and Earth Science*, 8, 63–81.
- Quarit District Administration Office (QDAO). (2015). Basic Socio-economic information about Quarit district, Unpublished Document.
- Regassa, N., & Yusuf, A. (2009). Gender differentials in migration impacts in Southern Ethiopia. *Anthropologist*, 11(2), 129–137.
- Rigg, J. (2007). Moving lives: Migration and livelihoods in the Lao PDR. *Population, Space and Place*, 13(3), 163–178.
- Rigg, J., & Salamanca, A. (2009). Managing risk and vulnerability in Asia: A (re) study from Thailand, 1982–83 and 2008. *Asia Pacific Viewpoint*, 50(3), 255–270.
- Schickler, R. S., Hiruy, N., Melak, B., Gelaye, W., Bezabih, B., Stephenson, R., & Noland, G. S. (2015). A venue-based survey of malaria, anemia and mobility patterns among migrant farm workers in Amhara Region, Ethiopia. *PLoS ONE*, 10(11), e0143829.
- Schiller, N. G., Basch, L., & Blanc-Szanton, C. (1992). Transnationalism: A new analytic framework for understanding migration. *Annals of the New York Academy of Sciences*, 645(1), 1–24.
- Schöfberger, I. (2017). How do places of origin influence access to mobility in the global age? An analysis of the influence of vulnerability and structural constraints on Senegalese translocal livelihood strategies. *Geographica Helvetica*, 72(1), 145.
- Sosina, B., & Holden, S. T. (2014). *Rural–urban youth migration and informal self-employment in Ethiopia*. Centre for Land Tenure Studies, Norwegian University of Life Sciences.
- Steinbrink, M., & Niedenführ, H. (2020). *Africa on the move: Migration, translocal livelihoods and rural development in sub-Saharan Africa*. Switzerland: Transcript.
- Teshome, T. (2010). Food security situation in Ethiopia: The case of Amhara National Regional State. 龍谷大学経済学論集, 50 (1), 55–74.
- Tsegaye, M. (2016). *The political economy of the land-livelihoods nexus in an era of ecological change and the global land rush: access to land, land conflict and large-scale land acquisitions in Ethiopia* (Doctoral dissertation), Institute of Social Studies, Erasmus University Rotterdam.
- UNFPA. (2022). Ethiopia population by year. <https://worldpopulationreview.com/countries/ethiopia-population>. Accessed June 04, 2022
- VanWey, L. K. (2003). Land ownership as a determinant of temporary migration in Nang Rong, Thailand. *European Journal of Population*, 19(2), 121–145.
- Winkels, A. (2004). *Migratory livelihoods in Vietnam: Vulnerability and the role of migrant networks* (Ph.D. Dissertation). School of Environmental Sciences of the University of East Anglia.
- Woldie, A., Degefa, T., & Gete, Z. (2010). Causes and impacts of seasonal migration on rural livelihoods: Case studies from Amhara Region in Ethiopia. *Norwegian Journal of Geography*, 64, 58–70.
- Wood, A. P. (1983). The decline of seasonal labor migration to the coffee forests of South-West Ethiopia. *Geography*, 68(1), 53–56.
- Zelalem, T. (2009). State sponsored and self-initiated resettlements: Their impacts on the ecology of resettlement areas (the case of Angar Gutin in Eastern Wallaga). In *Proceedings of the 16th international conference of ETHIOPIAN studies* (pp. 881–895).
- Zerihun, A., Kibret, H., & Wakaiga, J. (2015). Ethiopia: 2015. African Economic Outlook. Paris: OECD.
- Zoomers, A., Westen, G. V., & Terlouw, K. (2011). Looking forward: Translocal development in practice. *International Development Planning Review*, 33(4), 491–499.

Publisher's Note

Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Submit your manuscript to a SpringerOpen[®] journal and benefit from:

- Convenient online submission
- Rigorous peer review
- Open access: articles freely available online
- High visibility within the field
- Retaining the copyright to your article

Submit your next manuscript at ► [springeropen.com](https://www.springeropen.com)