AT THE ROOT OF EXODUS:

Food security, conflict and international migration

World Food Programme
## Contents

### Acknowledgements

- Acknowledgements

### Executive Summary

- Executive Summary

### Section 1: Introduction and Methodology

- Section 1: Introduction and Methodology

### Section 2: Global, Regional Trends and Dynamics of International Migration and Conflict

- 2.1 Migration trends
- 2.2 Armed conflict

### Section 3: Global Drivers of International Migration

- 3.1 Overview
- 3.2 Determinants of International Migration
- 3.3 Determinants of Outflow of Refugees
- 3.4 Determinants of Armed Conflict

### Section 4: The Voices of Migrants – Drivers, Impacts and Dynamics

- 4.1 Introduction
- 4.2 Syrian Refugees in Jordan, Lebanon and Turkey
  - 4.2.1 Background
  - 4.2.2 Livelihoods and food security before the crisis
  - 4.2.3 Outbreak of conflict and violence
  - 4.2.4 Impact on livelihoods and food security
  - 4.2.5 Migration journeys
  - 4.2.6 Current situation and future outlook
- 4.3 Afghans and Syrians in Greece
  - 4.3.1 Background
  - 4.3.2 Conflict affecting livelihoods and food security in Afghanistan
  - 4.3.3 Livelihoods and food security among Afghans in Iran
  - 4.3.4 Migration journeys
  - 4.3.5 Current situation and future outlook
- 4.4 Migrants in Italy
  - 4.4.1 Background
  - 4.4.2 Livelihoods and food security in home countries
  - 4.4.3 Migration journeys
  - 4.4.4 Current situation and future outlook
- 4.5 Conclusion - Main Drivers of Migration and Role of Food Security from the Migrants’ Perspectives

### Section 5: Conclusions and Recommendations

- 5.1 Conclusions
- 5.2 Recommendations

### Annexes:

- Annex I.A: The Model
- Annex I.B: Data
- Annex I.C: Estimation strategies and results

### References
Acknowledgements

This study was carried out by the Vulnerability Analysis and Mapping Unit of the World Food Programme under the guidance of Arif Husain, WFP Chief Economist and Deputy Director, Policy and Programme Division. Claudia Ah Poe, Luka Biong Deng Kuol, Rossella Bottone, Calogero Di Gloria, Katrina Frappier, Valerio Giuffrida, Nigussie Tefera, Aysha Twose, Susanna Sandström and Cecilia Signorini contributed to the study.

WFP wants to extend a special thanks to the United Nations High Commissioner for Refugees (UNHCR) for its engagement and support. We appreciated collaborating and discussing with George Woode, Craig Sanders and Valerie Gatchell from UNHCR Geneva, Stephane Jaquemet and Riccardo Clerici from UNHCR Italy, Philippe Leclerc, Giovanni Lepri and Maureen McBrien from UNHCR Greece. Similarly, we are grateful for the support provided by Simona Moscarelli, Serena Matarese and Giovanni Abbate of the International Organization for Migration (IOM).

WFP also expresses gratitude and appreciation for the support, expertise and data provided by the Food and Agriculture Organization (FAO), the World Bank, Save the Children and the Confederation of Misericordie.

Listening to the voices of migrants has been a core element of the study. This was facilitated by WFP Country Offices in Jordan, Lebanon and Turkey. A special thanks to Erin Carey and Dina Fahmi for supporting the remote phone survey. WFP is also grateful to the Governments of Italy and Greece for having granted access to the migrant reception centres.

Most importantly, WFP would like to extend sincere thanks to the migrants and refugees who shared their personal stories and experiences. This study would not have been possible without their contributions.
There has been a surge in international migration in recent years, reaching a total of 244 million individuals in 2015.¹ Forced displacement has also reached a record high, with 65.3 million individuals displaced worldwide by the end of 2015 — including refugees, IDPs and asylum seekers. Yet while the absolute numbers have increased over the last 15 years, migrants as a percentage of total global population has remained stable at about three percent.

A majority of migrants remain on their own continents — nearly nine out of ten African migrants settle on the African continent, while eight out of ten Asian migrants remain in Asia. Forced displacement is predominantly an issue outside wealthy economies: nine out of ten refugees are hosted by low and middle-income countries.

As an international actor in addressing food insecurity among refugees and other migrants, the World Food Programme (WFP) has undertaken a research study to determine the role that food security plays in cross-border migration. Given the dearth of data on this topic, the WFP study sought to answer some of the following questions: What is it that compels people to leave their homes? What role does food insecurity play in migration? Are these factors common across all international migrants, or do unique root causes spur specific migrant populations to move from their homes?

The study employed quantitative and qualitative research methods. WFP convened focus group discussions with migrants from ten different countries in Greece, Italy, Jordan, Turkey and Lebanon. Such discussions provided first-hand accounts regarding the decision-making process to leave, and provided valuable information on the situation in countries of origin, the triggers for migration, routes taken and future intentions. In an effort to validate the data collected from focus group discussions, WFP carried out household phone surveys among refugees in Jordan, Lebanon and Turkey.

Participants in the study included migrants from East Africa, West Africa, Asia and the Middle East, with the largest number of respondents originating from Afghanistan, Bangladesh, Iraq, Nigeria, Senegal, Sudan, Syria and The Gambia.

¹ UN 2016

**Definitions**

The study uses the International Organization for Migration (IOM) definitions: A migrant is "any person who is moving or has moved across an international border or within a State away from his/her habitual place of residence, regardless of (1) the person’s legal status, (2) whether the movement is voluntary or involuntary; (3) what the causes for the movement are; or (4) what the length of the stay is." International migration refers to short-term, temporary or permanent outmigration.

According to UN Refugee Convention, a refugee is someone who has fled his/her country because of a well-founded fear of persecution and should not be returned to a country where they face serious threats to their life or freedom. Refugees are defined and protected by the international law.

Whenever the term migrant is used in the report, it refers to all migrants, including refugees.
Key findings and conclusions

Though the initial driver of migration may differ across populations, countries and contexts, migrants tend to seek the same fundamental objective: to provide security and adequate living conditions for their families and themselves. Almost every single Syrian participant in the study, for example, strongly affirmed a desire to return to Syria if the situation stabilized and security prevailed.

The WFP study found that countries with the highest level of food insecurity, coupled with armed conflict, have the highest outward migration of refugees. Additionally, when coupled with poverty, food insecurity increases the likelihood and intensity of armed conflicts; something that has clear implications for refugee outflows. WFP estimates that refugee outflows per 1000 population increase by 0.4 percent for each additional year of conflict, and increase by 1.9 percent for each percentage increase of food insecurity. Food insecurity was also shown as a significant determinant of the incidence and intensity of armed conflict.

Food insecurity was also found to be a critical 'push' factor driving international migration, along with income inequality, population growth and the existence of established networks for migration. Further, the act of migration itself can cause food insecurity, given the lack of income opportunities and adverse travel conditions along the journey, in addition to the potentially crippling costs of transit.

Once a migrant’s journey has begun, food and economic security are important factors in a migrant’s decision about whether to continue a journey or settle in the first relatively secure location. The onward journey is motivated by a common desire for stability and secure livelihoods. This has clear implications for policymakers who aim to stem the dangerous land and sea journeys many migrants are forced to make.

Roughly, half of Syrians residing in Jordan and Lebanon indicated a preference to move on to another country, citing lack of economic opportunity and low levels of assistance provided.
In Turkey, however, where conditions are seen as more favorable, only a quarter of Syrians plan to move. Migrants who spent time in Libya described a particularly bleak experience with poor conditions, forcing many to continue their onward journey. Among migrants from Bangladesh and East and West Africa, food insecurity and resource constraints are key drivers for outward migration, whereas lack of safety and security were triggers for migration from Afghanistan and Syria. Many Afghans and Syrians reported that sustained conflict had destroyed employment opportunities and access to markets, leading to a depletion of assets. Food insecurity is a consequential factor for migration from Afghanistan and Syria. The study found that the motivation for migration could impact the size of the family or group that travels. For instance, WFP found that migrants who flee conflict do so typically as a family unit.

Upon arriving at a location with relative security, they decide to stay or some dispatch a family member (typically a young male) on an advance route to scout for a final location where reunification can take place and longer-term residence can be sought. Conversely, migrants who depart primarily for economic reasons (again, often young men), typically migrate alone without the intention for other family members to follow.

Importantly, the study found that migrants have access to social media and mobile technology and that the use of such technology has revolutionized information flows. Access provides migrants with real-time, accurate information that empowers them to make better decisions about which routes to pursue and other aspects of their journey.
Key recommendations

The study found that food security is one of the critical factors impacting international migration. Such findings have far-reaching implications for WFP, its partners and relevant humanitarian actors. In light of this research, the following recommendations are targeted to all stakeholders involved in the preparation and response to international migration and its outcomes.

1. The fundamental request of the refugee communities across the board is to seek international assistance in securing an end to the hostilities so that they can return to their respective countries and start the process of rebuilding their lives and livelihoods. Their foremost concern is to avoid a generational loss as children are growing without basic services including education.

2. Adequate livelihood and social support including food assistance must be provided to people who are internally displaced within their own countries or forced to move to neighbouring countries as refugees in order to escape conflict and war. The study shows that the majority of the refugees prefer to stay closer to their places of origin in culturally and socially familiar environments. They are not inclined towards undertaking long arduous journeys with uncertain endings to unfamiliar places with vast language, cultural, religious and social differences. Providing assistance in safe locations closer to their places of origin is a viable solution that will reduce onward migration flows as a survival strategy, result in more cost-effective humanitarian interventions, and yield greater socioeconomic benefits over the long term. Given the current geo-political climate, the international community should focus its efforts on Africa and the Middle East as regions that may continue to give rise to international migrants often escaping conflict.

3. In areas where a large influx of displaced people reside, support should also be provided to the vulnerable individuals of host communities. Many communities in low and middle income countries have accommodated disproportionately large number of refugees over extended periods of times, which has severely burdened their public infrastructure and services. Lack of assistance to host communities under such circumstances fuels animosity and conflict with refugee communities that only intensifies over time as disruptions to support services become more severe. Given the paucity of study in this area, it is recommended that the social, political and financial impact of international migration on host communities be further analyzed.

4. To advocate for uniform policies and approaches among all stakeholders involved in response to international migration is critical. Implementation of a cohesive and uniform refugee policy among host and transit countries with consistent refugee processing criteria, benefits, duration of assistance and general treatment principles can help to minimize refugee preferences for certain countries and reduce the trend to ‘comparison shop’ among migrants selecting an intended destination. The United Nations New York Declaration on Refugees and Migrants and European Union initiative for the development of a common strategy for action on migration will require better-informed and evidence-based investments to result in more effective ways for addressing the challenges of outward migration.

5. Additional research on the trends of international migration, furthering the understanding of the interplay between food insecurity, conflict and other factors that compel people to leave their homes should be undertaken. This includes deepening the knowledge on how decision-making processes of the refugee and migrant populations have changed with access to mobile technologies and social media. Enhanced understanding of international migrants’ access and use of real-time data can also better inform response to large-scale displacements of people and provide a significant opportunity to communicate with people previously considered hard to reach.
Section 1

Introduction and Methodology
International migration is a longstanding phenomenon in human civilization, shaping nations and identities across the world. However, there has been an enormous surge in international migration in recent years, reaching a total of 244 million individuals in 2015. Forced displacement has also reached a record high, with 65.3 million individuals displaced worldwide by the end of 2015 – including refugees, IDPs and asylum seekers. This is the highest number since the end of World War II.

Yet mobility is a critical feature of a globalized world. The current migration trend is likely to only intensify, as there are large and persistent economic asymmetries globally (World Bank 2016; UN DESA 2015). Better economic opportunities are a key pull factor: migration is a response to the gap in incomes between countries (Collier 2013). Demographic asymmetries, such as Europe’s aging and declining population and Africa’s young and growing population, are set to accelerate it further (Sachs 2016). The presence and size of a diaspora from the country of origin in the host country is also a significant pull factor. Push factors causing or contributing to migration or displacement can be structural and/or acute (UNU-WIDER 2016; Angenendt et al. 2016). Structural causes comprise negative political, economic and social development, and environmental degradation, while acute causes of displacement include armed conflicts, violence and civil unrest.

As an international player in addressing food insecurity among migrants, the World Food Programme (WFP) undertook this study to determine the role that food security plays in international migration. The main objective is to understand the dynamics of food security in the context of conflict-fueled international migration in countries of origin and ‘transit’ countries. While food security can play a role in triggering migration, the act of migration itself may cause food insecurity and influence a migrant’s decision to continue the journey.

The link between civil conflict, food insecurity and migration is complex and multidimensional. Conflicts can limit access to food but also destroy infrastructure and agricultural lands. If investment in health, education, agriculture and environmental programmes are diverted to military spending, the long-term impacts on food security can be adverse. Furthermore, hosting people under siege and imposing economic sanctions in conflict zones exacerbates food insecurity. While civil conflict as a cause of food insecurity is well established, the reciprocal relationship between them is both complex and ambiguous (Brinkman and Hendrix 2011). However, it appears that food insecurity greatly increases the risk of conflict (FAO 2010), in some cases leading to civil unrest (Brinkman and Hendrix 2011). In general, the combined effects of conflict and food insecurity on international migration are not well understood. WFP (2015) provides some evidence but the study is limited to a few countries in Latin America and focuses solely on localized conflict. Studies demonstrate that households living in violent conflict areas adopt different livelihood strategies to maintain their food security: international migration is one such strategy (Snorek et al. 2016). Armed conflict may not necessarily lead to out migration, but it affects livelihood strategies that directly or indirectly influence decisions to migrate.

This study adopts various approaches. A quantitative macro analysis of the global drivers of international migration examines the links between armed conflicts and food insecurity on international migration, adopting the approach of Naudé (2008) and Collier and Hoeffler (2004). The quantitative study also explores the impact of food insecurity and international migration on the likelihood of armed conflicts and its intensity. The results of the quantitative study are presented in section 3. Focus group discussions with migrants and refugees in Greece, Italy, Jordan, Turkey and Lebanon were also convened. These discussions, presented in section 4, provide first-hand accounts regarding the decision-making process to leave and provide valuable information on the situation in countries of origin, the triggers for migration, routes taken and future intentions. In an effort to validate the data collected from focus group discussions, WFP carried out household phone surveys among refugees in Jordan, Lebanon and Turkey.

2 The study uses The International Organization for Migration’s definition of a migrant: “Any person who is moving or has moved across an international border or within a State away from his/her habitual place of residence, regardless of (1) the person’s legal status, (2) whether the movement is voluntary or involuntary; (3) what the causes for the movement are; or (4) what the length of the stay is.” The international migration refers to short-term, temporary or permanent outmigration. According to the UN Refugee Convention, a refugee is someone who has fled his/her country because of a well-founded fear of persecution and should not be returned to a country where they face serious threats to their life or freedom. Whenever the term migrant is used in the text it refers to both refugees and other migrants.

3 UN 2016
Section 2

Global, Regional Trends and Dynamics of International Migration and Conflict
2.1 Migration Trends

Uncovering some of the key facts on both voluntary and forced international migration can help understand the issues at hand. In 2015, the number of international migrants, including refugees, reached a record 244 million and 21.3 million respectively – an increase of 41 percent and 37 percent since the year 2000 (Figure 2.1). Between 2005 and 2015, while international migration grew by 27 percent overall, the refugee population expanded by as much as 66 percent. The main contributing factor to the increase of refugees between 2010 and 2015 was the war in Syria. Excluding Syria, the increase from the end of 2011 to mid-2015 would have been only half a million refugees (UNHCR 2016, UNU-WIDER 2016).

Despite the surge, the percentage of international migrants remains at 3 percent of the total global population, largely unchanged from a century ago (IOM 2015). The majority of these migrants are not forcibly displaced. The percentage of refugees within the total number of international migrants – about 13 percent in 1990 – stood at 9 percent in 2015, almost flat for the last 15 years. In other words, the refugee population has increased in absolute terms but decreased in relative terms. In 80 percent of countries of origin, more than 90 percent of the population does not move (World Bank 2016). That is, most people stay behind. Only in Syria does the share of forcibly displaced exceed 50 percent of the population.

This general trend in international migration may conceal regional variation that reflects unique characteristics. During the last 15 years, international immigration increased considerably in Asia, and as of 2015, the level of migration there rivalled that in Europe, the leading migrant-hosting region (Figure 2.2). There was also a considerable increase in international migration to North America, followed by Africa. In Latin America, the Caribbean and Oceania, there is a stable trend of ongoing migration.

![Figure 2.1 International migration and refugee population (in millions)](source: UN 2015)
Most international migration occurs between countries within the same region. The volume of South-South migration is higher than South-North migration. In 2015, some 90.2 million international migrants resided in developing countries, compared with 85.3 million in developed countries (IOM 2015).

The great majority of international African migrants (87 percent) stayed on their continent, more than was the case in Europe (53 percent) and far more than in Northern America (2 percent) (Figure 2.3).

Forced displacement is predominantly an issue of middle- and low-income countries. The large majority of the forcibly displaced people do not have the resources or opportunities to flee beyond their own country or neighbouring ones. In 2015, 89 percent of all refugees were hosted by middle- and low-income countries (World Bank 2016).

Most migrants originate from middle-income countries. Over the last fifty years (1962-2012), the positive net migration (more people entering than leaving) of high-income countries has increased considerably, while upper middle-income countries that demonstrated negative net migration in 1962 showed positive net migration in 2012 (Figure 2.4). On the other hand, the negative net migration experienced by other categories of middle-income countries in 1962 was sharply up by 2012.
Figure 2.4: Net migration dynamics by income group, 1962-2012

Source: UN 2015

At the Root of Exodus: Food security, conflict and international migration
Figure 2.5 a-c shows top countries in terms of net out migration, and the number of refugees in these countries for the periods 2000-2005, 2006-2010 and 2011-2015. Until recently, emerging economies like India, China, Mexico, Bangladesh and the Philippines had the largest negative net migration rates, but now Syria is at the top of the list. In absolute terms, the countries with the highest negative net migration are in Asia. Many of these countries have hardly any refugees.
Figure 2.5 c: Top countries in terms of negative net migration, 2011-2015

Source: World Bank: World Development Indicators
2.2 Armed conflict

While the end of the Cold War brought many conflicts to an end, there has again been an increasing trend of armed conflict during the past few years with the number of conflicts reaching Cold War levels (Figure 2.6). Simultaneously, there has been a surge in the number of refugees. Of the armed conflicts in 2015, 40 percent were in Africa, one-third in Asia and one-fifth in the Middle East. However, the Middle East is currently the most violent region when it comes to driving up the death toll, largely due to the developments in Syria and Iraq (Melander 2015). While this is the case, the world is nevertheless less violent than during the Cold War and World War I and II. The number of fatalities caused by armed conflicts are now much lower (Petterson and Wallensten 2015).
The internationalization of internal wars is one key trend in modern conflicts, as shown in Figure 2.7 (World Bank 2011). This phenomenon may explain the new dynamics of migratory routes and the search for better life beyond neighbouring countries (Snorek et al. 2016). The eruption of violent conflict in Libya in 2011 provides a good example of how conflict affected not only the normal migratory routes of seasonal and economic migrants from West Africa to Libya, but also resulted in an increasing trend in migration from West Africa to Europe (Snorek et al. 2016).

Modern conflicts are typically characterized by phases of repeated violence, weak governance and instability (World Bank 2011). One-off episodes of civil war are now mostly historical occurrences; the most likely legacy of a civil war is a further civil war. Few countries are truly ‘post-conflict’, since these situations are typically fragile. Around 40 percent have reverted to violence in a decade (Collier 2009); 90 percent of the civil wars in the 2000s occurred in countries that had already had previous civil wars. This is an important observation from a food security perspective: countries in protracted crises are particularly vulnerable to food insecurity (FAO 2010).
Section 3

Global Drivers of International Migration
3.1 Overview

As part of the study, a quantitative analysis was conducted to determine the most significant global drivers of international migration. A random utility model was adapted for this purpose. The model is based on a conceptual framework underpinning individual or household decisions to migrate as fundamentally dependent not only on net economic benefits from migration, but also on threats to human security4 that could arise from economic, demographic, conflict, natural disaster, environmental change and food security factors.5

Detailed data on migration is highly inadequate. Given the difficulty in getting out migration data, the study follows Naudé (2008) and WFP (2015) and uses negative net migration per 1,000 population compiled by the World Bank. The study includes 88 countries or areas of origin that have experienced negative net migration (more people leaving than entering), at least once in a five-year interval spanning the period 1990-2015; 67 of them have experienced negative net migration in all periods. Furthermore, the outflow of refugees has been analyzed for 178 countries or areas of origin. The year 1990 is used as a base year and then data in five-year intervals are used due to availability. Most importantly, countries have started reporting undernourishment data since early 1990, but only at five-year intervals.

Table 3.1 summarizes the variables, data and data sources used in the estimation, while Figure 3.1 presents trends of these variables. Both international negative net migration and refugees per 1,000 population show declining trends in the 2000s, as compared with trends in the 1990s.

International negative net migration per 1,000 inhabitants decreased from its average peak of about 37 people per 1,000 in 1990-1995 to about 18 people per 1,000 in 2005-2010, but started rising, on average, to about 21 people per 1,000 in 2010-2015. Notwithstanding, the absolute number of negative out migration has consistently increased from about 20 to 25 million between 1990-2005, to 27 million in 2005-2010 and to 33 million in 2010-2015. Thus, the decline in proportion is mainly due to an increase in total population of the country as compared to the number of migrants out of the country.

The number of refugees per 1,000 population has also shown a declining trend from its peak of about 60 and 40 people per 1,000 in 1990-2000 to about 20 people per 1,000 in the late 2000s. However, the absolute number of refugees seeking asylum abroad increased until 2000, then substantially decreased from 2000-2005, but has increased again since 2005. Countries or areas that have experienced negative net migration at least once in the last 25 years have also experienced, on average, at least one year of armed conflict. The incidence of natural disasters increased from 1995-2005 and peaked in 2005 due to the occurrence of a tsunami in January 2005. The incidences of natural disasters have declined since 2005. Furthermore, while the world has experienced high population growth as well as population pressure, the proportion of undernourished people tends to decline overtime.

4 Human security is the combination of threats associated with war, genocide, and the displacement of populations due to violence and fear of violence.

5 The data sources and methodology of analysis can be found in Annex I.A – I.C.
### Table 3.1: Summary of variables and data sources

<table>
<thead>
<tr>
<th>Measure</th>
<th>Description</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Variable: Migration and Refugees</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net migration per 1,000 population</td>
<td>The difference between emigration and immigration per 1,000 of population. Provided as annual average over 5-year periods: 1990-95, 1995-2000, 2000-05, 2005-10 and 2010-15.</td>
<td>1990-2012</td>
</tr>
<tr>
<td>Refugee per 1,000 population</td>
<td>Total refugee population by country or territory of origin per 1,000 population per year over five-year intervals between 1990 and 2015. The classification of refugees is based on the 1951 UNHCR Convention and its Protocol in 1967 as well as the 1969 Organization of African Unity Convention Governing the Specific Aspects of Refugee Problems in Africa.</td>
<td>CIA World Factbook, World Bank: World Development Indicators</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Variable: Employment and Economic Opportunities, Costs of Migration and Aspirations</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP per capita</td>
<td>Obtained as average GDP (constant at 2010) in USD divided by total population per year over five-year intervals between 1990 and 2015. Time varying.</td>
<td>World Bank: World Development Indicators</td>
</tr>
<tr>
<td>GDP growth</td>
<td>Average annual growth rate of GDP over five-year intervals between 1990 and 2015. Time varying.</td>
<td>World Bank: World Development Indicators</td>
</tr>
<tr>
<td>Unemployment</td>
<td>The percentage share of the labour force in total population without work but available for and seeking employment, in five-year intervals between 1990 and 2015.</td>
<td>World Bank: World Development Indicators</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Variable: Food Security and Access to Food</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Undernourishment</td>
<td>The percentage of the population whose food intake is insufficient to meet dietary energy requirements continuously, in five-year intervals between 1990 and 2015. Time varying.</td>
<td>FAO, State of Food Insecurity in the World</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Variable: Demographic pressures</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>Population is total population in millions of the last year of each interval period of 5 years during 1990-2015.</td>
<td>World Bank: World Development Indicators</td>
</tr>
<tr>
<td>Youth population (15-25) years</td>
<td>The percentage share of youth population aged 15-25 of total population as of 1 July of each year in five-year intervals, 1990 to 2015. Time varying.</td>
<td>UN Population Division</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Variable: Political instability and conflict</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Armed conflict</td>
<td>The number of years during a five-year period when there was a civil war in a country, defined as at least 25 battle-deaths, 1990-2015. Time varying.</td>
<td>CDP/PRIO Armed Conflict Dataset v.4-2015, 1946 – 2014d</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Variable: Natural hazards</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The analysis is based on global panel data in five-year intervals spanning from 1990 to 2015. We use a dynamic panel estimator, specifically the ‘system GMM (generalized method of moment)’ estimator as it deals with several econometric problems that may arise due to: (1) unobserved time-invariant country specific characteristics that may be correlated with explanatory variables or cause omitted variable bias; (2) a reverse causality between net migration and some of its determinants\(^6\) (Naudé 2008:13); and/or (3) a dynamic process in migration. The past level of migration may influence the present level because of either persistence effects (networks, or ‘family and friends’) or instability (returning migrants). The dynamic process in migration can be captured through lagged values of migration in the estimation equation.

\(^6\) For instance, while population pressure can lead to out-migration, out-migration could be used to relieve population pressure in a subsequent period. Similarly, net migration may affect economic opportunities by influencing GDP growth through changes in skilled labour.
3.2 Determinants of International Migration

The results (see Annex I.C) show the current level of negative net migration is substantially influenced by its past level. This could be due to either presence of a diaspora from the country of origin in the recipient country that facilitates migration through providing information, reducing travel costs, and helping assimilation (Collier 2013) and/or network effects because of family, friends, relatives or neighbours migrating. These effects are widely documented for sub-Saharan African countries (Crisp 2006; ECA 2006; Mafukidze 2006, Adepoju 2008; Naudé 2008). However, Naudé (2008) noted that the negative coefficient of lag for past levels of negative net migration in sub-Saharan Africa could reflect a ‘situation where there is a cyclical or returnee migration rather than persistence in international migration flows; confirms the patterns of volatility in international migration in the region’.

Economic growth in countries or areas of origin (as measured by GDP per capita, as well as GDP growth), is among the most important drivers to offset negative net migration, provided that there is political stability, food security and an absence of natural or human-induced disasters in the countries or areas of origin. While economic growth in the countries of origin can help citizens afford the cost of migration, migration is also offset by further economic growth and better opportunities within the countries of origin (Collier 2013).

Increasing income per person (GDP per capita) as well as GDP growth, a proxy for employment opportunities (Hatton and Williamson 2004; Lucas 2006; Naudé 2008), profoundly offset net emigration by 1.8 and 1.1 per 1,000 inhabitants in the countries that had experienced net negative migration at least once over the period of 1990-2015; and by 2.1 and 1.4 per 1000 for those that had experienced net negative migration for the entire period over the last 25 years.

Furthermore, countries or areas that have experienced negative net migration at least once in the five-year intervals, or for the entire period 1990-2015, are characterized by high levels of undernourishment, population pressure and the incidence of armed conflict. Improved undernourishment (reducing the proportion of undernourished people) will lead to a reduction in negative net migration by 1.6 to 2.0 per 1,000 for both unbalanced and balanced panels.

An additional year of armed conflict will raise negative net migration by 1.7 to 2.1 per 1,000 inhabitants. Similarly, for countries that have experienced negative net migration for the entire period 1990-2015, an additional year of natural disaster will increase negative net migration by 0.035 per 1,000.

3.3 Determinants of Outflow of Refugees

The model is also applied to the population of refugees as a dependent variable instead of negative net migration. Like negative net migration, the past level of refugees positively and significantly influences the present level of refugees for the same reasons discussed in the case of international migration. Moreover, the outflow of refugees is influenced by the incidence of armed conflict and, to a lesser extent, natural disasters, more than economic factors such as GDP per capita and/or GDP growth. This suggests that refugees are not economic migrants, as it has been projected in some cases. The results have indicated that an additional year of armed conflict will lead to a 0.39 percent per 1,000 inhabitants increase in the outflow of refugees.

Moreover, the past level of undernourishment influences the outflow of refugees by 1.89 percent per 1,000 population for each percentage increase of food insecurity. This implies that people from countries or areas with high levels of undernourishment are more likely to become refugees. Furthermore, population pressure could also lead to an outflow of refugees.

3.4 Determinants of Armed Conflict

The incidences of natural disasters are more likely to cause and increase the intensity of armed conflicts, while economic growth is likely to reduce the occurrence and intensity of armed conflict. Moreover, food insecurity is one of the most important and significant determinants of the incidences of armed conflict. In other words, higher levels of undernourishment contribute to the occurrence and intensity of armed conflict. Furthermore, as highlighted by Collier and Hoeffler (2004), the past levels of negative net migration and refugee outflow are significant determinants of the likelihood for the occurrence and intensity of armed conflict.
At the Root of Exodus: Food security, conflict and international migration
Section 4

The Voices of Migrants - Drivers, Impacts and Dynamics
4.1 Introduction

Listening to migrants from various backgrounds and following different migration routes was a core component of this study. The main objective was to gain an in-depth understanding of the drivers and impacts of international migration and linkages between conflict, migration and food insecurity, based on the views and perceptions of the people directly affected. Focus group discussions were convened with international migrants in Greece and Italy, and with Syrian refugees in Jordan, Lebanon and Turkey. The qualitative information obtained was triangulated with data collected during phone surveys in Jordan, Lebanon and Turkey. The data was collected in August 2016.

Focus group discussions were held with 231 migrants from 10 countries of origin in Jordan, Lebanon, Turkey, Greece and Italy (see Figure 4.1). Purposive sampling was used to select the specific sites in each country to capture areas with high concentrations of migrants and a variety in terms of countries and areas of origin.

The majority of focus group participants originated from Syria, Afghanistan, Senegal, The Gambia, Nigeria, Eritrea, Sudan and Bangladesh.

Discussions were conducted with women and men in sex-disaggregated groups with overall nearly equal participation. Where possible, participants in each focus group originated from the same country. In addition, various age groups were covered ranging from young adults (18 to 29), to the middle aged (30 to 54) and elderly (55 and above). In the Syrian focus groups, participants were selected with a differentiation in terms of year of arrival ranging from 2011 to early 2016. Focus groups were conducted in both camp settings and urban settlements. In countries with WFP operational presence, focus groups included a mix of WFP beneficiaries and non-beneficiaries – with the exception of refugees in camp settings in Jordan, where all residents are entitled to receive food assistance, and Syrians in urban settlements in Turkey where only WFP beneficiaries could be interviewed. Participation in focus groups was voluntary and not compensated.
Focus group discussions were held with 231 - 116 female, 115 male - migrants and refugees from 10 countries of origin in **Greece, Italy, Jordan, Lebanon and Turkey**.

<table>
<thead>
<tr>
<th>From</th>
<th>To</th>
<th>Number of people interviewed</th>
<th>Gender breakdown</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Syria</strong></td>
<td><strong>Lebanon</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Baabda Kaza (Beirut)</td>
<td>65</td>
<td>55%</td>
</tr>
<tr>
<td></td>
<td>Bar Elias (Bekaa)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mina (Tripoli)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Jordan</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Azraq camp</td>
<td>50</td>
<td>45%</td>
</tr>
<tr>
<td></td>
<td>Za’atari camp</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mafraq</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Turkey</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gaziantep</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sanliurfa</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Afghanistan and Syria</strong></td>
<td><strong>Greece</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elaionas</td>
<td>28</td>
<td>71%</td>
</tr>
<tr>
<td></td>
<td>Elliniko I &amp; II</td>
<td></td>
<td>29%</td>
</tr>
<tr>
<td><strong>Bangladesh, Egypt, Eritrea, Gambia, Morocco, Nigeria, Senegal, Sudan</strong></td>
<td><strong>Italy</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Italy</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lampedusa</td>
<td>40</td>
<td>13%</td>
</tr>
<tr>
<td></td>
<td>Rome</td>
<td></td>
<td>88%</td>
</tr>
</tbody>
</table>
A mobile phone survey was designed to provide additional quantitative data to complement qualitative findings. This was only feasible in countries with WFP operational presence and hence only covered Syrians in Jordan, Lebanon and Turkey. A total of 570 phone interviews were conducted (Figure 4.2).

For Jordan and Lebanon, the mobile phone survey was outsourced to a professional call centre based in Amman. In Turkey, interviews were conducted by WFP staff.7

This chapter presents the findings of linkages between conflict, food security and migration and is divided into four sections. The first focuses on Syrians in neighbouring countries, the second on Afghans and Syrians who have reached Greece via Turkey, and the third on migrants from West Africa, Eastern Africa and Asia in Italy who have crossed the Mediterranean from Libya. The last section concludes with a summary on common drivers of migration based on the three case studies.

7 For Jordan and Lebanon, the sample sizes provide 90 percent confidence with a +/- 5 percent margin of error. The data in Turkey provides 90 percent confidence with a +/-9 percent margin of error.
4.2 Syrian Refugees in Jordan, Lebanon and Turkey

“When we can’t afford both medicine and food, I tie scarves around my boys’ bellies at night so they don’t wake up crying from stomach aches because they are hungry.”
4.2.1 Background

Syria is now in its seventh year of civil war, with various armed groups in control of much of the country. Since 2011, there has been a continuous exodus of Syrians seeking to escape the conflict, mostly into neighbouring countries. As of November 2016, UNHCR reports some 2.75 million in Turkey, 1.01 million in Lebanon, 656,000 in Jordan, 225,400 in Iraq and 117,300 in Egypt – bringing the total to almost 4.8 million.8

According to UNHCR statistics, overall, Syrian refugees are almost equally distributed by sex, 51.4 percent male to 48.6 percent female. Children account for nearly half of the refugee population indicating that mainly families are on the move.

Most Syrian refugees live in urban or peri-urban communities with only every tenth person living in a camp. The figure is slightly higher in Jordan, with 22 percent of Syrian refugees residing in camps.

Host country policies towards Syrian refugees have changed over the last five years. Originally welcomed by the neighbouring states, refugees are increasingly perceived as a burden due to overstretched basic services and increasing security concerns. This becomes particularly apparent in Lebanon where about one in four people are refugees. Restrictions on the entry of Syrian refugees have been rapidly implemented with borders almost sealed in all countries concerned.

![Figure 4.3: Demography of Syrian refugees and countries of destination (regional response)](image)

4.2.2 Livelihoods and food security before the crisis

The majority of Syrian focus group participants reported having comfortable lives in Syria before the crisis. In urban areas, a large proportion of the interviewees owned their own businesses, worked as skilled labourers such as carpenters, mechanics and blacksmiths or were former government employees. Some also engaged in unskilled manual labour. Those from rural areas mostly owned small farms or relied on paid agricultural labour. The majority of the participants in the focus groups can be considered

![Figure 4.4: Primary income source in Syria before migration (mobile survey)](image)

middle class before migrating. According to the mobile survey, only 16 percent come from poorer backgrounds – those depending on casual agricultural or non-agricultural labour (see Figure 4.4).

This is roughly in line with poverty rates of 12 percent observed in Syria prior to the war (World Bank 2007). In almost all interviewed households, men were the only income earners; women stayed at home and took care of the children and domestic chores. Most men and women had completed primary school and some secondary school and vocational training. Few men had university degrees. In the exceptional cases of women with higher education degrees, they were previously employed as teachers or nurses. In almost every household, both boys and girls had attended school in Syria and were expected to finish at least high school – before the conflict interrupted their lives and livelihoods.

Across all Syrian focus groups, participants enthusiastically described the diversity and quality of their diets before the crisis in Syria. There was heavy emphasis on the daily consumption of fresh fruit, vegetables and dairy products and frequent consumption of fresh meat – three or four times a week on average. All participants, regardless of livelihoods or location in Syria, explained that they ate three meals a day before the crisis (see Figure 4.5). Those from rural areas like Daraa said their farms had provided them with staple crops, vegetables, eggs and meat throughout the year. In urban areas like Homs and Aleppo, food was purchased at local markets, which were well stocked throughout the year and very affordable. A woman from Raqqah who migrated to Turkey claimed that “before the war, we were living a decent life, we were living in paradise.” While men were concerned about political oppression prior to the war, they noted that “everybody in Syria who was able to work was able to have a healthy diet.”

4.2.3 Outbreak of conflict and violence

All focus group participants were well informed about the crisis and its origins, though reluctant to discuss the political drivers of the conflict. Some groups explained that it was a conflict between religious sects, with systematic oppression of certain groups. They explained that as the crisis had evolved, there were now countless factions and their differences and motivations were too complicated to understand. While the presence of Islamic State (IS) dominated conversations among people from Raqqah and Deir Ezzur, people from Aleppo focused on being trapped between government forces and rebel groups. With an eye on recent events in Aleppo, one woman became emotional and noted that “Aleppo was unfairly caught between the two sides. The civilians are the ones paying the price. The world has forgotten about us and the people who are still trapped inside the city.”

None of the participants had ever experienced a crisis like this before in their lifetime. Only few of the elderly participants referred to earlier events – for example, the 1982 conflict in Hama. However, these previous conflicts were relatively quickly controlled by the national authorities. Crises, riots and conflict did not spread because communication was very limited. This is in stark contrast to the current conflict, where social media has played a major role.
4.2.4 Impact on livelihoods and food security

The immediate and pressing impact of the crisis in Syria was the main threat to safety and security. Men and women reported constant bombing and the presence of armed forces in their villages and towns. They were afraid to leave their homes. Houses and businesses were destroyed by bombs and shelling. Many participants spoke about family members or neighbours who had been injured and killed. Many were forced to leave suddenly without most of their possessions.

Children stopped going to school and men stopped going to work. There was no electricity and no water, and they had to cook with firewood. In winter, they relied on firewood for heating, but as this was often unavailable, they were left with blankets in freezing weather conditions. There were no more doctors and specialists; many women died during childbirth. A woman from Aleppo said there was "a shortage of everything and we were forced to live like in the Middle Ages."

Participants from Deir Ezzur explained how they suffered at the hands of the regime and later under the IS. First the city was shelled by the government, then IS came and introduced all kinds of restrictions. As one man put it, "they made people hungry, stole our produce, closed schools and prevented people from working." Former government employees were no longer receiving salaries and people no longer had access to banks. Some people tried to make a living by selling food or gasoline on the street.

With the proliferation of armed groups and religious sects, participants described increasing mistrust among neighbours and friends.

The armed forces were abducting people at random and forcibly conscripting young men. Many people also feared the abduction and rape of women and girls. "IS was suffocating us and interfering in every aspect of our lives. They were decapitating people who were caught trying to escape." When asked about the impact of the crisis, women were particularly concerned about the long-lasting psychological effects of the conflict on their children.

As a consequence of the conflict, the food security situation deteriorated as livelihoods and markets were disrupted. People were forced to sell their belongings such as furniture and gold in order to buy food. Even during the Eid celebrations, they were not able to afford new clothing for their children – a common tradition – in order to prioritize food.

Many food markets were controlled by powerful actors leading to steadily increasing food prices. In Deir Ezzur, a besieged city, one participant said a bag of sugar would cost 100,000 Syrian pounds (over USD 450).

Families were forced to cut out protein and dairy products. Most had to reduce portion sizes and ate only one or two meals a day. Some said they were living off starchy foods, such as bread, macaroni, rice or potatoes supplemented with only cucumber, as meat, butter, tomatoes, oil and sugar were all too expensive.

They had some tea and bread in the morning, and rice or potato with cucumber in the evening. One woman said they would "spend days looking for bread and couldn't find any"; she explained that if someone in her village found bread, they would hide it under their mattress. When flour was available, they would bake bread, which was previously purchased in bakeries. They would then dry it so it lasted longer, and consume it in watery soup, adding only garlic for flavour.

Many reported that they fully relied on food assistance. However, when assistance was cut off, they could only "eat edible leaves found in the surrounding area."
Figure 4.5: Number of meals per day before crisis, during crisis and in destination country (mobile survey)
4.2.5 Migration journeys

**Internal displacement**

Almost all interviewed families in Jordan and Turkey, and some in Lebanon, were internally displaced multiple times before crossing the border. Overall, nearly eight in ten households were internally displaced inside Syria at least once and 65 percent twice or more (see Figure 4.6).

In Lebanon, many participants had pre-existing ties in Lebanon – family across the border, or men working there before the crisis. These households usually moved directly to Lebanon rather than moving within Syria. A similar pattern was observed for families in Raqqah, some of them moving directly to Turkey.

"They made people hungry, stole our produce, closed schools, and prevented people from working."
Most moved to another village or town where they had family or friends; they would call ahead to learn if it was safe and then move with the whole family. Usually this would require walking, sometimes long distances. They only brought food and the clothes they were wearing along with them. Those without relations were forced to stay in collective shelters like schools or mosques, or abandoned houses.

In general, it was reported that host communities were welcoming at the beginning, but when the situation deteriorated and food started to become an issue in the new locations, the internally displaced were treated as "second-class citizens." Often, the stay would be less than a month, and they would move when the bombing and conflict reached the new area. Due to the conflict and frequent movements, there were very limited work opportunities.

In one group, a woman explained how hard it was to feed her family during these internal displacements: "My kids were dying in front of my eyes; the men had to join extremist groups to be able to feed us. It was the only option." This example illustrates how livelihood constraints and food insecurity are partially fueling the conflict in Syria, as many men have no choice but to join armed groups in order to provide for their families.

Toward the end of their internal displacements, food insecurity increased drastically. Many were forced to reduce the number of daily meals, and cited difficulties finding any food at all. A woman in Azraq camp who left Syria recently said: "We had to eat grass to survive. My kids stayed up all night crying because they were hungry."

**Triggers for leaving Syria**

All focus group participants were asked why they had finally decided to leave Syria. In the last stages of internal displacement, the situation was dire. Participants highlighted ongoing fear, life in collective shelters, limited access to basic services and struggling to find food. In many cases, the immediate trigger point to leave was related to injury or death. One woman explained that a bomb had exploded next to her son; as soon as they left the hospital, they arranged to leave the country. Another explained that a bomb landed on her house and killed her husband; she immediately packed up and took her children across the border. They felt they no longer had any choice: "We didn't know what lay ahead. All we knew was that we needed to escape." Some participants did not leave because of immediate conflict, but instead were forced to move for lack of livelihoods and food. One man said, "There was no crisis [war] where I lived, but I had to leave because there was no more work." In particular, in Turkey, a larger proportion reported lack of food or job opportunities as the primary trigger. Results of the phone survey show that the vast majority of households left Syria for safety and security-related reasons, followed by lack of livelihood opportunities and access to food.

**Migration routes**

The majority of interviewed households chose their destination based on proximity and safety of the route; this was the case for 70 percent among the households interviewed during the phone survey. For example, Daraa is extremely close to the Jordanian border, while Homs is much closer to Lebanon. Şanlıurfa in Turkey was cited as the natural extension of Deir Ezzur and Raqqah, while Gaziantep was the city closest to Aleppo in terms of geographic proximity and similar characteristics. One participant reported that "Gaziantep reminds us of Aleppo and we feel comfortable here." Figure 4.8 illustrates the routes taken by the families of the focus group participants.
Figure 4.8: Migration routes of focus group participants interviewed in Jordan, Lebanon and Turkey

This map presents generic routes explained by migrants during the focus group discussions; this is not a comprehensive summary of migration routes.
In the majority of cases, families fled Syria together. This was because they felt it was safer and preferred not to separate. Some participants mentioned sending off young men first, to prevent them from being forced to join armed groups. In some cases, husbands and fathers moved first in order to find work and set up a house, before being followed by their families.

Every focus group participant knew someone still in Syria – someone unable or unwilling to leave, or someone who decided to return. Some have government jobs in Damascus, and are relatively safe there. In other examples, elderly people stayed at home, as they were not seen to be a target by armed forces or could not make the journey. In some cases, people came to Lebanon or Jordan and then returned to Syria, preferring to be at home: "Lots of people would rather die in Syria than be a refugee somewhere else." In Gaziantep and Sanliurfa, many participants reported knowing families who were simply unable to afford the journey and were therefore still in Syria. In addition, there were reports of people trapped in besieged areas.

Access to information and role of social media
Most people called friends or family in the country they intended to move to, to understand the situation prior to moving and to confirm that migration was a safe option for their families. The role of mobile phones and social media was essential in this process.

In Lebanon, many people already had businesses or personal relationships across the border before fleeing the conflict. So in the early years, it was a relatively simple journey in a taxi to the border. Similarly, before the war, there were close relations between residents in Aleppo and the main towns.

"Lots of people would rather die in Syria than be a refugee somewhere else."
in southern Turkey, with businessmen buying raw materials and Syrian families spending their summer vacations in Turkey. In the early days of the crisis, many simply followed extended family who had migrated earlier.

Most people interviewed in Turkey used smugglers to organize their journey. Information is shared person-to-person or by calling numbers that can be found on the internet. Associated costs are widely known and talked about “like the cost of buying a pack of cigarettes.” In Jordan, groups explained that someone in their village would have contact with a smuggler. This person was familiar with the route and would explain all the details, including stops, overnight locations, checkpoint locations and other pertinent information.

**Cost of migration**

It is clear that economic hardship and food insecurity have contributed to migration, but it is also evident that the migration itself is exacerbating food insecurity – resulting from the immediate lack of cash, the longer term impact of depleted savings and assets, the creation of significant debt, and the challenge of starting a new life in an area with limited social capital.

Generally, migration costs vary depending on the distance, the risks of the route, the number of family members, whether all members have the correct paperwork, whether the areas are controlled by the government or the Free Syrian Army, drivers’ preferences and other factors.

As the conflict escalated, the journey out of Syria became more complicated, dangerous and expensive. Those who left in the initial stages of the crisis explained that they were transported to the border area by the Free Syrian Army, who refused to take any money at all. Then, from year to year, prices increased steadily as reported by focus group participants (see Figure 4.9).

In Azraq camp in Jordan, most people had arrived within the past year. The costs of the journey to the border have increased exponentially, so recent arrivals have paid very high sums. One woman explained that her family had sold everything they had, spent all their savings and borrowed money to cover the costs of the journey.

Most families did not have sufficient funds to cover the journey and most people were forced to deplete their savings and sell off jewelry, gold, furniture and other belongings. Some men explained that they scraped together enough money for the journey, but then arrived in a new country with no money or assets to cushion the transition. This had created a precarious situation for their families. Many people borrowed money from friends, family and neighbours to cover the cost of the journey. Numerous participants explained that they still had debts resulting from the journey. In the new location, they had been unable to earn sufficient income to repay these.

Some participants explained that at the checkpoints, they were required to pay extra to avoid the women and/or baggage being searched. One woman said her bag contained insulin for her husband; when this was found at the checkpoint, some insulin was required in exchange for passage.

In Gaziantep and Şanlıurfa, some participants reported facing many unexpected costs due to last minute changes to the migration route, requiring longer itineraries and multiple changes in transport. In most cases, this was due to security issues, but in some, it was simply to increase the journey costs, thereby increasing the smuggler’s profits. Several people reported that they were forced to leave their belongings with the smuggler, as they took more and more dangerous routes.

There were several reports of ‘hassling’ raising serious protection concerns. For example, in Azraq camp in Jordan, a woman provided an example of an interaction at a checkpoint; she told the armed forces “We are hungry, this is why we are leaving.”

In response, the soldiers offered to shoot her and her children, “so your hunger won’t be such a problem.”

---

**Figure 4.9: Estimated cost per person to leave Syria in USD (based on focus groups)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Cost (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>210</td>
</tr>
<tr>
<td>2012</td>
<td>380</td>
</tr>
<tr>
<td>2014</td>
<td>930</td>
</tr>
<tr>
<td>2015</td>
<td>1500</td>
</tr>
</tbody>
</table>
4.2.6 Current situation and future outlook

Livelihoods and food security

Syrians living in all three countries are mostly reliant on external assistance and poorly paid casual labour. They are paid less than the local population, have unreliable work and struggle to meet their families’ needs. There are also major concerns about the education opportunities for their children in the countries. One woman said: "We now have a generation of children who remain illiterate." According to the mobile survey, 68 percent of refugee households in Turkey have primary school-aged children, but only 63 percent of the girls are attending school and 75 percent of the boys. In Lebanon, every third child is out of school. In Jordan, every sixth child is out of school.

Many households reported receiving food assistance in the form of a voucher. This was considered essential to meet their food needs. Most of the families are able to consume two meals per day, a major improvement compared to the situation prior to their departure. However, they have not been able to reach pre-crisis levels in terms of the quality and quantity of their diet (see Figures 4.5 and 4.10).

Figure 4.10: Food consumption levels among assisted Syrian households (based on M&E PDM data, 2016, Quarter 1)

<table>
<thead>
<tr>
<th></th>
<th>Lebanon</th>
<th>Jordan</th>
<th>Turkey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>8</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Borderline</td>
<td>34</td>
<td>23</td>
<td>21</td>
</tr>
<tr>
<td>Acceptable</td>
<td>58</td>
<td>70</td>
<td>78</td>
</tr>
</tbody>
</table>

Triggers for onward migration

The journey does not stop once migrants have crossed the border – many families were forced to move multiple times within Jordan, Lebanon and Turkey. A variety of reasons were cited, including searching for work, eviction, finding different or cheaper apartments and reuniting with other family members. For many, the journey still has not stopped. In Jordan and Lebanon, every second household has the intention of moving to another country. People said they would go anywhere "as long as we can send our children to school, and there is a future." Most prefer to go somewhere where they already have family or friends. The main countries mentioned were Belgium, Germany, Sweden, Canada and the United States. When asked if they would undertake the illegal journey by boat, most participants were very hesitant; they were fully aware of the danger involved.

The proportion of households with the intention to move on is lower in Turkey, with only one in four interviewed households planning to do so. It is worth noting that all participants were receiving food assistance, while the groups were mixed in Lebanon and Jordan, which may have impacted their decision. Other factors are work opportunities, as Syrians in Turkey have better access to informal labour markets allowing them to provide for their families.

During focus group discussions, participants in Şanlıurfa and Gaziantep stated that they would prefer to remain in Turkey mainly because the cultural environment is very similar to home. In addition, the cost of the journey to Europe and the fear of risking their lives during the journey were essential factors influencing their choice to remain in Turkey. In Jordan and Lebanon, a few participants explained that they had received offers to be resettled in Australia or Canada, but had rejected them as they were concerned about language barriers and cultural differences.
Return to Syria

When asked if they regretted leaving Syria, opinions were strongly influenced by participants’ current living conditions. In Azraq camp, where freedom of movement is very restricted, many people expressed regret about coming to Jordan – they have no legal recognition, and no work opportunities. Here, one woman explained, “If only we could go back in time - we would rather be oppressed than be refugees living in this camp.” In Za’atari camp, however, most did not regret the decision to leave. There are more informal livelihood opportunities there, and most send their children to school. In Lebanon and Turkey, some expressed discontent, but most understood that staying in Syria was no longer an option for the time being.

Almost every single Syrian participant strongly affirmed a desire to return to Syria if the situation stabilized and security prevailed. A man said: “even if we had to sleep in the streets, we would go back.” Some said foreign countries must stop interfering in Syria, while others recommended a no-fly zone, which would allow them to return. Others explained that they would need stability, some economic recovery and jobs in order to return.

Figure 4.11: Intentions to move on or stay in current country

At the Root of Exodus: Food security, conflict and international migration
"I had to hide for seven days with only water and nothing to eat, because of the Taliban."
4.3.1 Background

Greece was one of the main gateways for migrants to reach Northern Europe throughout 2015 and the beginning of 2016. At the peak in October 2015, up to 9,000 arrivals per day were reported. Originally, Greece was a country of transit. Following the closure of the northern borders for Afghans in February and for Syrians and Iraqis in March 2016, many migrants are trapped inside Greece, unable to continue north. According to UNHCR figures, as of November 2016, more than 170,200 people have arrived by sea since the beginning of the year.\textsuperscript{9} It is estimated that around 61,600 people are currently living in 48 reception sites throughout Greece. Others are living in informal settings or have moved on to other countries. While nearly half of the new arrivals originate from Syria, the numbers also show that the vast majority of Syrians remain in countries close to their home. While 4.8 Syrians have fled to and remained in neighbouring countries, only one million have requested asylum in Europe\textsuperscript{10} (see section 4.2).

In terms of population composition, most migrants and asylum seekers were from Syria, Afghanistan, and Iraq. According to available data on arrivals since January 2016, arrivals by men doubled those of women, comprising 42 and 21 percent of arrivals, respectively. There was a large proportion of children, which accounted for 37 percent of all arrivals. These figures indicate a high prevalence of families, at least at the official sites. There is also a number of unaccompanied children, with some 1,480 such children as of August 2016. They are mainly adolescent boys.

Currently, all official sites across the country are managed by the Government of Greece. The role of UNHCR is to lead coordination and protection activities and the agency also plays a capacity-strengthening role. Food is mainly provided by the government through food catering companies. In few settlements, the Danish Refugee Council (DRC) is providing food.

In two sites in Attika, Elleniko and Elaionas, four focus group discussions were conducted with 15 women and 8 men from Afghanistan, and 5 women from Syria. One of the main differences was the departure date from their home countries. While the Syrians left more recently, mainly in 2015 and 2016, the Afghan group was divided into two groups: those who left Afghanistan long ago and spent many years in Iran (including some who were born in Iran), and those who left Afghanistan in late 2015 or early 2016, mainly for safety and security reasons.

\textsuperscript{9} UNHCR data on Greece is available at http://data.unhcr.org/mediterranean/country.php?id=83. Accessed on November 6, 2016

\textsuperscript{10} This data can be found on the website of the Migration Policy Centre of the European University Institute (Florence), which provides key data and information on the impact of the refugee crisis in the European Union. More information can be found at http://syrianrefugees.eu/.
This section focusses on people who have fled Afghanistan and Syria interviewed in Greece. The full analysis of the Syria conflict and links with food security and migration was covered in the previous section and will not be repeated here unless interesting differences emerge.

4.3.2 Conflict affecting livelihoods and food security in Afghanistan

While living conditions among Syrian displaced were generally good prior to the outbreak of the civil conflict (see section 4.2), the situation was more diverse among the Afghan group. Afghanistan has been exposed to several episodes of conflict over the past 40 years, starting with the Soviet-Afghan war (1979-1989) and the civil war under the Taliban that erupted in 2001 with the intervention of NATO forces.

Some of the focus group participants who left Afghanistan more recently came from a better economic background, working for the government, television companies and petroleum companies. Others came from low- to middle-income backgrounds, working as farmers, shepherds and daily wage labourers. Only a few women were working; mainly single women, widows or those whose husbands had left their families.

The more recent situation shows many similarities with Syria. People faced constant security threats. Examples included suicide bombings, kidnapping of children and robbery. Many had close relatives who were injured or killed during the conflict. Others explained their husbands or relatives were persecuted and threatened by the Taliban because their job was affiliated with the government. Some men were injured by gunfire or other circumstances and could no longer provide for their families. People could no longer access their work safely.

Children, in particular girls, were prohibited from going to school. One man explained that his son was kidnapped on his way to school and later killed. Several participants explained that they were caught in the middle between Government, Taliban and NATO forces. Increasingly, the Taliban forces have filtered into government positions, posing a constant threat to them and their families.

Most participants explained that they were able to satisfy their family’s food needs during peaceful times. Only in times of conflict or violence, or when natural disasters hit, was food consumption affected, as food availability on markets was limited and prices increased to very high levels.
In recent times prior to leaving Afghanistan, many respondents faced episodes where they were not able to access sufficient food, including in the capital Kabul. When insecurity did not allow them to leave their home, they would reduce food consumption and the number of meals to one meal per day, sometimes eating one piece of bread. One man explained that in the presence of the Taliban, he remained hidden in his house for seven days, with access only to water and without any food. One woman explained that her husband disappeared for seven years due to the conflict and that in his absence she used to make and sell carpets for a living. However, it was hard to sell them during the conflict; she said she and her children often would go to sleep hungry. The group also mentioned three regions in Afghanistan that are not accessible as the Taliban are blocking the bridge leading to this area. They have heard of people fleeing in search of food.

4.3.3 Livelihoods and food security among Afghans in Iran

Afghans who had fled from earlier conflicts and natural disasters, and lived in Iran for many years, were mainly working as daily labourers in the agriculture, livestock or construction sectors. Some women were tailors or handiwork artisans. Those who left for Iran longer ago and remained in the country generally managed to meet their basic needs. They did not face any food access issues. On the other hand, they continued to face certain difficulties that hindered their full integration into Iranian society. For example, many migrants mentioned increasing costs of residence visas, compounded by underpaid, informal employment. In addition, the high cost of education was repeatedly raised as a concern.

4.3.4 Migration journeys

Previous displacements among Afghans

The 40-year on and off conflict in Afghanistan pushed many people to move back and forth between Afghanistan and Pakistan or Iran – making migration a common coping strategy. An elderly man who has been displaced many times in his life said: "I have become really tired of this." Some respondents tried to return to Afghanistan during better times with the aim of re-establishing livelihoods, but poor security conditions eventually forced them to leave again.

"If you work for the government, the Taliban will kill you, if you work for the Taliban, the government will kill you, if you work for NATO, both will kill you."

One man spent 12 years in Pakistan after fleeing the Soviet-Afghan war before returning to Afghanistan. However, Pakistan is no longer perceived to be safe today as people would be at risk of being forced into joining Taliban forces.

Triggers for migrating to Greece

The Afghan group that recently left home mainly referred to poor security conditions within Afghanistan. Some were wounded in bombings. Another left when his two brothers were killed, and others reported incidents of torture or suicide bombings. One man working for NATO received a warning and he left before he could be caught. He said: "if you work for the government, the Taliban will kill you, if you work for the Taliban, the government will kill you, if you work for NATO, both will kill you." One of his sons was kidnapped from school and killed. After the funeral of his child, he decided to seek refuge outside of Afghanistan for the safety of his other children.

At the Root of Exodus: Food security, conflict and international migration
A woman teacher was threatened at gunpoint by the Taliban, who ordered her to stop coming to school to work. Several in the group reported deliberate food poisoning in schools to discourage children from attending. Some women also raised the concern that their children were under threat of being recruited as Taliban fighters.

All respondents who left Afghanistan many years ago declared that it was primarily due to poor socio-economic conditions that they migrated after having settled in Iran. These factors, combined with the 2014-2015 large-scale migration into Europe, triggered the decision to leave Iran. A mother explained that her son had said: "I can't continue school here and I do not want to become a construction worker." He was inspired by his classmates; many had moved or were planning a move to Europe.

The Syrians interviewed in Greece originated from Aleppo, Kobane and Homs. They all fled Syria as a consequence of the conflict and the associated hardship as outlined in section 4.2.1. Several Syrian participants were of Kurdish origin and had crossed into Turkey. But staying there was not an option due to their ethnic background. Most of the Syrian people interviewed already had family members in the Netherlands, Germany or other Northern European countries – who they were planning to follow.

Migration routes

For both Afghan and Syrian interviewees, most left with their entire family, with many traveling with young children, including infants and under-fives. In some cases, adolescents were sent to Europe on their own after hearing successful stories from relatives or neighbours. A few made it to Germany or Sweden with the intention that the rest of the family would follow.

The majority of the Afghans reached Greece via Iran and Turkey. The main reasons for choosing the route were proximity to the border and formerly established networks. Syrians fled via Turkey, some of them spending one or several years in Izmir to gain enough money to continue their journeys to Greece. This was less of an option for the Afghan and Kurdish people who crossed Turkey in several days or in a maximum of one week. Some mentioned ethnic tensions and others referred to language barriers.

"I can't continue school here and I do not want to become a construction worker."
For most, the journey was hard. Afghans spoke about disguising their sons as girls when fleeing Taliban controlled areas. One man explained that the hardest part of the journey was when his group passed through the mountains between Turkey and Iran through heavy snow. His 95-year old mother-in-law was with them and six other women and children.

In the middle of the mountain range they were spotted by Iranian border control officers from a distance but managed to escape and were able to cross into Turkey.

Many witnessed deaths along the way. Both Syrians and Afghans were still terrified by the dangerous boat trip from Izmir or other coastal towns in Turkey to Lesbos, using simple inflatable boats without captains. Most had made several attempts, some reported even six attempts before they made it through – having to wait several days in the forests around Izmir with limited food and drinking water. Boats were crowded and particularly dangerous for small children, as they were at risk of being stepped on. They described how boats capsized, and one man reported that he lost his young son at sea.

When arriving on the mainland after a four-day and night boat trip from Lesbos, most tried to make their way up to the northern border immediately. Following mid-February 2016, Syrians and Afghans were separated. The Afghans were told to return to central Greece, while Syrian and Iraqis were able to cross the northern borders until 20 March 2016, when the borders were fully sealed.

The Syrian people interviewed were not yet aware that the border was sealed for all migrants when they travelled to the northern borders. Some tried to stay there as long as possible until their resources were depleted, and they were unable to meet their minimum food and other basic needs. At this point they were obliged to return to Athens and settle in one of the official settlements. Since then, it has been extremely risky for families that have tried to reach Europe via alternative routes. An Afghan woman explained that she and her children were separated from her husband when they tried to reach France on a truck.

Figure 4.13: Migration routes of focus group participants interviewed in Greece

This map presents generic routes explained by migrants during the focus group discussions; this is not a comprehensive summary of migration routes.
Access to information and role of social media

Overall, both Afghans and Syrians were aware of routes and modalities of travel by word of mouth from previous migrants – relying mainly on phones and internet to connect with friends and family. Some said they heard the news on TV, others learned which routes to take through social media. Smugglers would explain modalities and next steps at each stop, moving them along a well-established network. Most are still hoping that their journey will not end in Athens. They referred to Victoria Park, a known meeting point for migrants in the centre of Athens, where they can exchange relevant information. A few respondents also referred to bribes to facilitate access to certain information.

Cost of migration

Similar to the previous case study, the cost depended on the smuggler, the route and the number of people travelling. Table 4.1 provides an overview of some of the costs cited by the focus group participants:

<table>
<thead>
<tr>
<th>Route</th>
<th>Average per capita costs in USD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afghanistan to Greece</td>
<td>2,600</td>
</tr>
<tr>
<td>Iran to Greece</td>
<td>1,500</td>
</tr>
<tr>
<td>Turkey to Greece</td>
<td>800 (price varied by season)</td>
</tr>
<tr>
<td>Greece to France</td>
<td>900</td>
</tr>
</tbody>
</table>

Selling furniture or property, borrowing money from friends and family and spending savings were the main ways for Afghans and Syrians to cover costs. Most Syrians sold assets along the way, some sold their houses and land for minimum prices before their departure from Syria and two families reported staying in Turkey to work and save up enough money for the maritime journey.

Afghans had to provide evidence to the traffickers that they had adequate resources available before migrating – an indication that they were coming from relatively better backgrounds within their home country. This was different for Syrians, who mostly carried all financial resources with them or relied on remittances from relatives to pay traffickers along the route.

Afghans who had lived in Iran explained that they left the complete amount with an individual trusted by them and the human traffickers in Iran. Upon receiving confirmation that a migrant had reached a stop along the route, this individual would transfer a sum of money to pay the smuggler for the completed leg of the journey. The system seems well established inside Iran, functioning as a sort of insurance system for migrants to reach their next destination.
4.3.5 Current situation and future outlook

Livelihoods and food security

Most people arriving in Greece were from slightly better-off backgrounds and were able to afford the passage to Europe. However, during the past months, they fully depleted their resources and are now fully relying on external support including food assistance. They have little opportunities to integrate into the local labour market, which is heavily affected by the economic crisis in Greece and also experience language barriers. Only a very few children are attending an official school as part of a pilot project. Some informal schooling is organized at the camps.

Shelter is a major issue, particularly in one of the sites visited, where migrants resided in small tents inside an old public building. Sanitary conditions were very poor. A young adolescent described the conditions: "We live in small tents, there is no privacy, the place is made for a crowd."

At the second site, food catering was a concern voiced by migrants and international organizations. Inhabitants complained about the quality, variety and type of food provided. They explained they would much prefer to be able to cook their own food. Those who received voucher cards from the International Rescue Committee (IRC) opted not to consume most of the food provided in-kind, leading to major wastage. They also reported that there were no specific foods for young children, and a young woman was observed feeding her 10-month and 2-year-old children with a mix of black tea, bread and a lot of sugar – a coping strategy typically applied in Syria in times of stress. UNHCR and the international community are fully aware of these concerns and are trying to address them through advocacy and capacity-strengthening measures.

"At least we are in safety now. On the boat we can die once, in Afghanistan we can die every 15 minutes."

Triggers for onward migration

Greece was supposed to be only a transit point. All respondents reported their desire to reach western and northern Europe, mainly Germany, Sweden, Belgium, France or the UK. Despite the closing of borders and conditions in Greece, most Afghans did not regret the decision to leave Afghanistan given the very poor living conditions there and the threat of the Taliban. One man explained: "At least we are in safety now. On the boat we can die once, in Afghanistan we can die every 15 minutes."

Like the Afghans, all Syrians expressed the intention to continue to northern Europe. They see little economic opportunities in Greece where they are also facing major language barriers. They all registered during the pre-registration exercise and applied for the UNHCR facilitated relocation programme. Most intend to seek asylum or request family reunification in Germany, Sweden, France or Belgium.

There is high frustration among Afghans regarding their different treatment from Syrians as they are both experiencing similar conditions in their home countries. Bombings, shelling, suicide attacks, killing, torture, kidnapping and being trapped between different factions are daily realities in both Syria and Afghanistan. The Afghans feel it is unjust that Syrians are perceived as more in need and that they have higher chances of being eligible for relocation.11

Return to Turkey or Iran

One Syrian woman said she would consider going back to a camp where she had stayed before in south-eastern Turkey. There, people were able to work and received a voucher to buy their own food. Other participants strongly rejected this option, saying they would never go back. They had already paid too much to make it to Greece. The Syrian Kurds in particular said that Turkey is not an option for them. The Afghans who had previously lived in Iran declared that they have no intention to return. However, some said they would consider going back if equal access to education was guaranteed for their children. A women explained: "in Iran, we had everything, the main problem was the school for our children. We took this risk just for them and their future."

11 UNHCR (1 July 2016): Accommodation for Relocation Project Factsheet: "Asylum-seekers with nationalities for which the average recognition rate of international protection at the EU level is 75 percent or above, according to the most recent quarterly Union wide Eurostat data, would be eligible for relocation to other EU Member States where their asylum applications will be processed." This means that under the current European international protection recognition rates, Afghans would not be eligible.
"It was not my intention to risk my life on a boat to Italy."
4.4.1 Background

Italy has increasingly become a recipient country of migratory flows due to its geography. In recent years, recurring crises and poor economic conditions in many African countries created a steady flow of arrivals by sea to the southern coast of Italy, particularly in Sicily. Additionally, a high number of arrivals are registered at the northern border of Italy, from an overland migration route via the Balkans.

According to data from UNHCR, as of November 2016, some 161,600 arrivals were registered since the beginning of the year. Main countries of origin are Nigeria, Eritrea, Sudan, The Gambia, Côte d’Ivoire and Guinea.

The majority of migrants arrive in Italy via Libya, with a smaller proportion from other North African countries, including Egypt. Migrants travel by inflatable boats, which causes a high number of fatalities. As of October 2016, some 3,250 people were reported dead or missing during their transit by sea since the beginning of the year.

**Figure 4.14: Demography and countries of origin of new arrivals in Italy (2016)**

In contrast to Syrians and Afghans (see sections 4.2 and 4.3), the vast majority of people attempting the journey are single men and only 14 percent are women. Approximately 15 percent are unaccompanied minors, many of whom are likely to be male teenagers.

Asylum-seeker migrants who arrive in Italy follow a lengthy registration process and checks at ‘hotspots’ where they can be detained for a legal maximum of 72 hours. Authorities decide if they are eligible to apply for asylum, sending prospective refugees to reception centres and issuing others with notices ordering them to leave Italy by their own means within seven days – an option few take. The United Nations High Commission for Refugees (UNHCR), the International Organization for Migration (IOM) and non-governmental organizations (NGOs) are present to provide basic services, registration, protection, monitoring and advocacy. Food assistance is funded by the government and provided by catering companies.

For the purpose of this study, the reception centre on the island of Lampedusa (Sicily) was selected, as it is one of the main ports of entry into Italy. The site is a transit centre and classified as a ‘hotspot’ under the European Agenda on Migration\textsuperscript{13}, where migrants stay for a few days before being resettled to other centres in Italy. Participants were mainly from West African countries and Bangladesh. In addition to Lampedusa, focus groups were convened in Rome, in an informal settlement in the centre of the city, to better understand the perspectives of those migrants who have reached the next stage of their journey. In this case, participants mostly came from East Africa.

4.4.2 Livelihoods and food security in home countries

Many East and West Africans explained that prior to their migration they worked in the informal sector, though many were formerly unemployed. As they were relatively young, many were still going to school before migrating. Bangladeshi migrants reported that at home, they received a salary of two Euros for 10-12 hours of work per day. Many West Africans and Bangladeshis reported being heads of household, despite their young age, due to the death or absence of their fathers. Most had completed only primary school, with a few completing secondary school. Many were forced to drop out of school in order to support their families.

Migrants in Lampedusa had relatively limited diets at home; many reported having two meals per day in normal times. Meals were mostly comprised of rice and vegetables, though fish was consumed quite frequently in Senegal and The Gambia. The East Africans interviewed in Rome reported consuming mostly \textit{injera} (a sourdough flatbread) with \textit{shiro} (stew with beans or chickpeas), and some fruit. Meat was rarely consumed, and East Africans noted that they consumed meat only on special occasions such as weddings or religious celebrations. Most of the interviewed migrants expressed that meeting the needs of their families was an ongoing difficulty before they left their home countries. During difficult times, participants reported that they could only afford one meal per day. One Bangladeshi remarked that they had to share one portion between four people.

Given the diversity of backgrounds, the issues impacting livelihoods and food security varied widely from structural poverty and economic hardship to conflict and political instability. Most West African migrants emphasized a lack of livelihood opportunities, rather than any specific shock or crisis. The younger West African participants explained that they and their siblings were forced to stop attending school as their families could not afford school fees. Conflict in north-eastern Nigeria and political instability in The Gambia have exacerbated the poverty faced by many families.

In West Africa, the primary reason for migration was the limited number of work opportunities at home, and the resulting economic constraints. A number of these migrants mentioned health problems within their families and difficulties in paying medical bills. One participant explained that migration was "a personal decision because you see your mother suffering."

Political unrest and conflict was a critical additional factor in the case of Nigeria, due to the insurgency of Boko-Haram in the north-eastern region, and in The Gambia, following the political clash between government and opposition forces. One Gambian expressed such frustration, saying: "I just wanted a peaceful place." For most other West African participants there was no particular issue or crisis to highlight at home, but they had simply dreamed of moving to Europe for a better life, and wanted to fulfill those aspirations.

The East African migrants emphasized the scarcity of job opportunities, low wages for unreliable work and exposure to security risks. An additional key factor for the Eritreans is military service, which is mandatory, indefinite and very badly/irregularly paid. Many Eritreans cited this as a key reason for migration – avoiding military service and conflict, and searching for stable work.

Economic migration from Bangladesh is a common phenomenon, with many migrants departing to work in the Middle East and North Africa. The Bangladeshi focus group participants in Lampedusa explained that the lack of livelihood opportunities, in addition to flooding and price increases, forced them to leave home.
Migration routes

Almost all migrants from East and West Africa travelled alone, leaving their family with the promise of remittances and hopes of a future reunion. The journey is considered too dangerous and expensive for the whole family to move together. Most of the migrants on this route are young; they believe younger people will survive the tough journey and have a higher likelihood of finding reliable work.

Migrants from West and East Africa firstly moved within their own countries, mostly from rural areas to bigger urban areas or the capital city. In general, they moved one or two times before migrating across the border. The majority of migrants simply hoped to find stable work, wherever that might be. When they did not succeed in finding stable employment or satisfactory conditions, they would move on to the next best option, including in neighbouring countries, hoping to achieve a better situation. On the way, they would locally collect information about transiting routes and following steps. The journey continued in this incremental way, following a general path that eventually brought them towards Europe.

Many migrants perceived Libya as a country offering plentiful job opportunities and therefore headed into this direction. Others reported having friends or relatives who successfully completed the journey to Italy through Libya, and therefore headed to the North African country. Deteriorating and unbearable conditions in Libya in recent times forced all of them to finally pursue migration to Italy by boat, even if this was not part of their initial plan. One Gambian migrant explained: "It was not my intention to risk my life on a boat to Italy." As such, it emerged that Europe was not always the 'make or break' destination. This is also confirmed by IOM data showing that 56 to 83 percent of migrants from various countries have stayed for more than six months inside Libya.

The most common route from West Africa was: The Gambia or Senegal to Bamako, Mali; on to Ouagadougou, Burkina Faso; to Niamey, Niger; up through the desert via Agadez to reach Libya; and a final journey to Italy by boat. A few others mentioned the North African route: Senegal; Mauritania; Algeria; Libya; and Italy. The migrants from Nigeria went to Niger, then up through the desert to Libya, and on to Italy. These findings show how Niger, in particular, is a gateway for migration. The East Africans interviewed in Rome travelled mostly through Sudan (Khartoum) to Libya and on to Italy, though some Eritreans passed through Egypt rather than Libya.

The Bangladeshis flew directly to Libya and worked there for some years. They would have stayed longer to continue working in the country, but since the outbreak of the 2011 crisis, conditions have deteriorated and they struggled to find work. Some reported companies ceased operations or employers disappeared due to the ongoing conflict. In addition, with the growing flow of West African migrants, competition for informal work increased and pay decreased. The Bangladeshis reported moving multiple times within Libya, from Tripoli to Misrata to Benghazi, in search of work. As a result of these worsening conditions, Bangladeshis found themselves unable to meet their basic needs. They were therefore forced to join the flow of migrants and pursue a sea route to Italy.

Figure 4.16: Migration routes of focus group participants interviewed in Italy

This map presents generic routes explained by migrants during the focus group discussions; this is not a comprehensive summary of migration routes.
Conditions in transit countries
Without exception, migrants suffered maltreatments during their journeys. Many focus group discussion participants in Italy worked in the construction sector or took other daily informal work along the way. Frequently, migrants are not properly remunerated, or are not paid at all for weeks or months. One man explained: "in Bamako, when they are paying their people ten euros, they pay you five euros." Another reported how he begged his employer to pay him so that he could send his family some money for food and other things. The journey is long and arduous, spanning many countries and many months, leaving families behind without a reliable source of income or food. This highlights the fact that while food insecurity is an initial driver of migration, the migration itself exacerbates food insecurity.

Conditions were most difficult in Libya, where the great majority of migrants arriving to Italy pass through. All participants described a degrading and discriminatory atmosphere amid a general sense of insecurity, with ongoing violence: "You don't have any power there, there is no government. That is not a safe place." Migrants lived in shared housing with others from the same country in areas considered 'ghettos' for sub-Saharan migrants, so called 'Grigaras'. Jail is a common occurrence in the migrants' stories of Libya. Several participants reported arbitrary arrests and detention, human rights violations and torture. Healthcare is limited, if available at all. One Gambian migrant reported being imprisoned with his brother who subsequently died of an asthma attack due to lack of medical assistance. Migrants described sharing one meal among five prisoners every 12 hours.
These meals consisted of bread, or spaghetti, leaving them undernourished. When leaving jail, after suffering this treatment for months, they stated: "You look like you are not a human being."

These findings on conditions in Libya are supported by secondary data from IOM. The agency highlights security concerns reported by migrants in the country, including arbitrary detention, freedom of movement restrictions and the increasing occurrence of kidnapping for ransom. While few women could be interviewed in Italy, gender-based violence is a reality that is likely to affect women particularly and unaccompanied minors along the entire migration routes.

**Cost of migration**

The costs to cover the journey can exacerbate food insecurity, as family members incur debt, or migrants prioritize limited resources to cover transport costs. Migrants from West Africa would find out the cost of the next leg of the journey by asking locally, and calling relatives and friends who had already made the trip. They would then save up to cover these costs. As migrants are often exploited for their work, saving up for the journey took many months.

With these incremental costs to cover each step of the journey, the migrants could not accurately estimate the total cost of the journey (which often took more than a year). The boat ride to Italy is the most significant cost along the way, but the price varies largely depending on an individual’s connections. One Senegalese explained that he did not pay at all, as his employer offered to cover the cost. Others reported that the total cost could be as high as USD 2,500.

Migrants interviewed are mostly young men from poor families who did not have the social or financial capital required to borrow money for travel. As a result, their meagre earnings must cover their basic needs, in addition to transport costs. Many migrants mentioned the difficulties of paying for housing and food, while struggling to save for the next part of the journey. Only in exceptional circumstances – for example, accessing release from Libyan jail, or a particularly expensive Italian boat trip – were they forced to borrow from family or friends.

The East Africans explained that in order to cross the border from Eritrea into Sudan, a fee must be paid or it is possible to cross illegally. From Sudan into Libya, they stated that the cost is USD 1,600. This
Triggers for onward migration

During the focus group discussions in Lampedusa, it emerged that most participants from West Africa wished to stay in Italy if they could find stable employment and support their relatives back home. Others with connections to migrants in other European countries were planning to move on. For the Bangladeshis, Europe offers the promise of earnings, debt repayment and remittances. They mostly desired to stay in Italy and find work, some hoping to open a small shop. On the contrary, East Africans who had been in Italy for two to three weeks all expressed a desire to leave Italy. They were surprised by the poor living conditions for migrants in Rome and wanted to move on. Many had family connections in Germany, the Netherlands or the United Kingdom.

Return to country of origin

Some West African migrants expressed regret about the decision to migrate, particularly due to the hardships endured along the journey (including imprisonment, beatings, theft). However, after only a few days in Italy, there was a general sense of hope among them. Returning home was not an alternative due to the lack of livelihood options.

For the Bangladeshis, Europe offers the promise of earnings, debt repayment and remittances. They mostly desired to stay in Italy and find work, some hoping to open a small shop. On the contrary, East Africans who had been in Italy for two to three weeks all expressed a desire to leave Italy. They were surprised by the poor living conditions for migrants in Rome and wanted to move on. Many had family connections in Germany, the Netherlands or the United Kingdom.

4.4.4 Current situation and future outlook

Livelihoods and food security

Journeys of many months in hard conditions had an impact on the focus group participants in Italy, whose food security worsened along the way. Migrants on this route were unable to save money during the journey, and given their overall poor background, they now fully rely on external support, including food assistance.

Reception conditions in Italy are generally satisfactory, both in terms of food assistance and shelter. However, the situation varies case by case across the different reception centres. Conditions are particularly worrying in informal settlements where migrants can only count on the assistance of volunteers and spontaneous donations from civil society organizations to fulfill their basic needs. In addition, migrants face difficulties integrating into the Italian local society, in terms of job opportunities, language and child school attendance.

"You look like you are not a human being."

"You look like you are not a human being."

You look like you are not a human being.

At the Root of Exodus: Food security, conflict and international migration
4.5 Conclusion - Main Drivers of Migration and Role of Food Security from the Migrants’ Perspectives

In examining the reasons for migration, it is necessary to separate the initial reasons people left their homes and the motivations for ongoing movement.

In conflict-affected countries, such as Syria and Afghanistan, the direct impact of the conflict is an initial, immediate reason for people to leave their homes. The impacts of conflict (insecurity, bombing, besiegement and damaged infrastructure) disrupt livelihoods and markets. This, in turn, leads to displacement, widespread depletion of assets, and food insecurity. These factors combined – direct impact of the conflict, disrupted livelihoods and food insecurity – lead to international migration as illustrated in Figure 4.17. The migrant stories have also shown that the relationship is not only linear as displacement and migration itself can exacerbate food insecurity and fuel conflict.

Over many decades, Afghanistan has been affected by consecutive wars and internal conflict, and has also been exposed to recurrent natural disasters such as drought and harsh weather conditions. International migration, especially among the slightly better off Afghans, is a regular coping strategy. Many have migrated before and have close links with Iran and Pakistan.

Afghans who left home more recently shared similar experiences with the Syrians, with violence and persecution as primary drivers of migration. But Afghans who had lived in Iran for many years chose to leave because of limited livelihood opportunities in Iran and an inability to pay the high costs of their children’s education. These push factors were compounded by stories about opportunities in Europe, pulling them out of Iran to seek a more hopeful future for their children.

The West Africans, East Africans and Bangladeshis were primarily driven to migrate due to livelihood constraints and food insecurity. Their stories illustrate a lack of access to regular work: the resulting inability to provide for their families pushed them to leave in search of stable employment. In the case of East Africans, conflict, safety issues and mandatory military service were additional factors leading to migration.

The West Africans did not express an overwhelming desire to get to Europe. They were seeking stability and livelihoods, and many would have been happy to stay wherever these were found. As these migrants were unable to find stable work along the route, they continued to move. This finding is also reflected among the Syrians: in Turkey, with better opportunities and more food assistance, more Syrians plan to remain. Whereas in Jordan and Lebanon, most are hoping to move on in search of better livelihood options. The Syrians who reached Greece via informal routes had similar motivations for economic security and clear aspirations to give a better life to their children. Therefore, the set of incremental steps that create migration routes is driven by the search for stable livelihoods – including economic opportunities, education, and food security.

Although the initial driver of migration differs across contexts, the migrants and refugees are all seeking safety and the ability to provide for their families. The onward movement is motivated by a common desire for stability, with livelihoods and food security as key pull factors.

Figure 4.17: The vicious cycle of conflict, poverty, food insecurity and migration
Section 5

Conclusions and Recommendations
5.1 Conclusions

The intent of this study was to understand the complex relationships between food insecurity, conflict and migration. Besides a quantitative analysis of the drivers of international migration, this study has uniquely considered the perspectives of international migrants, including refugees.

A majority of migrants, including refugees, remain on their own continents

While the absolute numbers of migration have increased over the last 15 years, the number of migrants as a percentage of the total global population has remained stable at about three percent. Furthermore, the majority of international migrants remain on their own continents—nearly nine out of ten African migrants settle on the African continent, while eight out of ten Asian migrants remain in Asia. Forced displacement, including refugees, IDPs and asylum seekers, is predominantly an issue outside wealthy economies: nine out of ten refugees are hosted by low and middle-income countries. In addition to this, most conflict-affected people stay behind in the countries of origin: in 80 percent of countries of origin more than 90 percent of the population does not move across borders (World Bank 2016). Only in Syria does the share of forcibly displaced exceed 50 percent of the population. Until recently, emerging economies like India, China, Mexico, Bangladesh and the Philippines had the largest net out-migration rates (more people leaving than entering), but now Syria is at the top of the list.

People leave due to conflict, disrupted livelihoods and food insecurity after multiple internal displacements

The study highlighted a variety of links between conflict, food security and migration. A principal link is that conflict directly drives migration in some contexts, while in others, livelihood instability and food insecurity is the main cause of migration. However, during prolonged periods of conflict and migration, the links are less linear; cause and effect become intertwined and reinforce one another.

In conflict-affected countries, both qualitative and quantitative analysis showed that the direct impact of the conflict often causes people to flee their homes. An important finding is that the outflow of refugees is influenced by the incidence of armed conflict and, to a lesser extent, natural disasters and economic factors. This suggests that refugees are not economic migrants, as it has sometimes been projected in the public debate. Results indicate that for any additional year of armed conflict, there will be a 0.4 percent increase in the outflow of refugees. The quantitative analysis also shows that countries with high levels of undernourishment, along with economic indicators and population growth, have higher levels of out-migration. People from countries with high levels of undernourishment are also more likely to become refugees. Undernourishment influences the outflow of refugees by a 1.9 percent increase.

Even in the context of violent conflict, when human security becomes the primary trigger of out-migration, the role of food security is still integral. For example, in Syria and Afghanistan, armed conflict and violence force people to leave their homes and disrupt livelihoods and markets, often resulting in food insecurity. These factors combined – the impacts of conflict, multiple internal displacements, disrupted livelihoods and food insecurity – result in international migration. Particularly among Syrians, it was found that people had been displaced internally many times before making the final decision to leave their country.
Families often travel together when migration is conflict-driven
In conflict-driven migration, whole families usually migrate together – often seeing this journey as their last hope before they run out of resources to make the trip. Once in a safe place, most families decide to stay, while some have the intention to move on. They send young males ahead to explore routes to minimize risks and reduce costs, with the final intention to apply for family reunification. On the contrary, economic migrants – often young men – usually migrate alone without the immediate intention of having other family members follow.

Migration exacerbates food insecurity
While food insecurity can be a trigger for migration, the migration itself exacerbates food insecurity. The migration journey is often long and arduous, spanning many countries and many months, leaving families behind without a reliable source of income or food. These families are also often burdened with debt from financing the cost of the migrant’s journey. Therefore, for families left at home, migration can at least temporarily increase their food insecurity.

Ongoing debt repayments can impact food security for migrant households with limited resources, and unpaid debts again may negatively impact livelihoods for those who are owed money. In aggregate, this enormous sum of unpaid debt has created profit and livelihoods for those involved in the complex web of transport and human trafficking along the migration routes.

Food insecurity also drives conflict
The quantitative analysis shows that food insecurity is an important determinant of the likelihood of armed conflict and is a driver of the intensity of conflict. While economic growth reduces the likelihood and intensity of an armed conflict, undernourishment is one of the most important and significant determinants of the incidences of armed conflict.

This quantitative finding was corroborated by the qualitative data. The focus group discussions with Syrian and Afghans highlighted that food insecurity caused by conflict can further fuel the conflict, in a vicious cycle. As many families are internally displaced for long periods, some are reportedly forced to join armed groups and others may choose to join armed groups as the only option to feed their family. Thus, in this context, the migration and resulting food insecurity partially fuel the conflict.
Previous displacements are a key driver for out-migration

The quantitative analysis showed that previous migration is one of the key factors determining new migration, which can be explained by the establishment of migration networks. International migration has become a regular coping strategy for Afghans impacted by consecutive wars, internal conflicts and recurrent natural disasters, in particular drought. Many have established close links in Iran and Pakistan.

Onward migration is driven by a desire for stability triggered by economic factors and food insecurity

Although the initial driver of migration differs across contexts, migrants are seeking the same thing: safety and the ability to provide for their families. The onward movement is motivated by a common desire for stability. Economic and food security are key factors triggering ongoing migration.

Onward movement of migrants is largely determined by the conditions in ‘transit’ countries. For example, within the neighbouring countries, around half of the Syrian refugees in Lebanon and Jordan would prefer to move on to another country, while only a quarter of Syrians in Turkey plan to move. This may be partially explained by access to work, the amount of assistance provided and whether migrants are perceived as a burden on the local social and public services. In Libya, the recent bleak conditions led to an increased out migration of formerly integrated labour migrants, as is the case with many Bangladeshi migrants.

Other factors determining onward migration include the availability of minimum levels of resources to afford the onward journey, levels of education or human capital and associated aspirations as well as ethnic backgrounds.

The use of new technologies and social media has revolutionized information flows

The access to new technologies and the spread in the use of social media has revolutionized the scope of migration, its speed and how it is organized. Migrants have near perfect access to information on potential migration routes, smuggler networks, associated costs, risks and expected benefits to inform their choices and decisions. This has major implications for appropriate responses by policymakers and the humanitarian community.
5.2 Recommendations

The study found that food security is a critical factor impacting international migration. Such findings have far-reaching implications for WFP and the humanitarian community as a whole. The following recommendations are targeted to all actors involved in the preparation and response to international migration to address the root causes and implications of migration.

- Adopt a two-pronged approach to address root causes of migration through political commitment and dialogue at the highest levels, while continuing to provide adequate humanitarian assistance and safe passage for the most affected and most vulnerable. A key request of the refugee communities is to seek international assistance in securing an end to the hostilities so that they can return and start the process of rebuilding their lives and livelihoods. Their foremost concern is to avoid a generational loss as children are growing without basic services including education.

- Invest more in strengthening livelihoods and food security in countries of origin and in neighbouring countries hosting refugees. Support provided to areas bordering countries of origin is more cost-efficient and brings social benefits in the long-term when countries stabilize.

- Support the vulnerable individuals of host communities. Many communities in low and middle-income countries have hosted disproportionately large numbers of refugees over extended periods of time, which has severely burdened their public infrastructure and services. Such circumstances fuels animosity and conflict with refugee communities that only intensifies over time as disruptions to support services becomes more severe.

- Advocate for multilateral actions among policymakers and other stakeholders in response to migration. Thanks to mobile technology and social media, migrants have full access to information to adjust their decisions. The implementation of a cohesive and uniform refugee policy within the EU with consistent refugee processing criteria, benefits, duration of assistance and general treatment principles will minimize refugee preferences for certain countries. The current initiative by the EU to develop a common strategy for external action on migration and the expected UN Declaration on Refugees and Migrants will require more informed and evidence-based investment for more effective ways of addressing the challenges of out-migration.

- Raise awareness among policymakers and the public that migrant trajectories are highly diverse. Simple assumptions classifying certain nationalities as economic migrants often do not hold true, as was particularly evident among Afghans who migrated for highly varied reasons. This also includes generating more evidence on migration dynamics in third countries such as Libya and Iran, which previously absorbed large numbers of labour migrants and have now become a major gateway for migration into Europe.

- Further research on migration dynamics to understand the interplay between food insecurity, conflict and other factors that compel people to leave their homes. Deeper understanding on how refugees and migrants’ decision-making processes have changed with access to mobile technologies and social media can be very insightful. In fact, enhanced understanding of international migrants’ access and use of real-time data can better inform response to large-scale displacements of people and provide a significant opportunity to communicate with people previously considered hard to reach.
Annexes

Annex I.A: The Model

This study uses a random utility\textsuperscript{14} model developed by Kirchhoff and Ibanez (2001), Ibanez and Velez (2008) and then adapted by Naudé (2008). While the former two studies applied it to displacement migration in Colombia that arose due to violence, the latter extends it by incorporating rapid natural environmental degradation and disaster as causes of forced migration, and also focuses on international migration but limited to Sub-Saharan African countries. This study further extends its application using food security indicators as a catalyst for international migration and also puts more emphasis on negative net migration and refugees seeking asylum abroad at the global level.

The model is based on a conceptual framework underpinning individual or household decisions to migrate as fundamentally dependent not only on net economic benefits from migration, but also on threats to human security\textsuperscript{15} that could arise from factors such as economic, including food security, demographic, conflict, natural disaster and environmental change. These factors could lead to voluntary or forced migration. While voluntary migrants are often motivated by economic factors such as better employment opportunities and food security, forced migrations – the movement of refugees or internally displaced peoples (IDPs) – are caused by conflicts and natural or environmental disasters, including drought, famine, earthquakes and Tsunami, among others.

The drivers leading to international voluntary and/or forced migration in a two-country setting could be expressed as follows: Assume country $m$ and $s$ have households or individuals migrating both from $s$ to $m$ and vice versa. The model assumes individuals or households are migrating if the utility\textsuperscript{16} from migrating exceeds the utility of remaining within a country (Naudé, 2008:8). In a two-country setting, households or individuals in country $s$ will migrate to country $m$ if:

$$U_{im} - U_{is} > 0 \quad (1)$$

where $U_{im}$ is the indirect utility from migrating to country $m$ and $U_{is}$ is the indirect utility from remaining in country $s$.

Since the random utility model has deterministic and random effect components (Ibanez and Velez 2008), the random utility model in Equation (1) can be expressed as:

$$U_{im} = N_{im} + \epsilon_{im}; \quad U_{is} = N_{is} + \epsilon_{is} \quad (2)$$

Where $N_{im}$ and $N_{is}$ are deterministic components and $\epsilon_{im}$ and $\epsilon_{is}$ are the random effects components of the random utility model.

The decision of individuals or households to migrate is largely influenced by determinist components of the random utility model (Naudé 2008:8). These will include the relative wages or income opportunities in both countries, the cost of migration, household risk aversion, the cost related to crossing international borders as well as access to basic information through social networks that could help to lower costs and/or reduce risks, expressed by a function of lagged international emigration. Moreover, decision makers could also take into account food security versus political instability/violent conflicts, and natural hazards/disasters.

\textsuperscript{14} A random utility model is composed of deterministic components, computed using observable variables, and unobserved stochastic error components.

\textsuperscript{15} It is the combination of threats associated with war, genocide, and the displacement of populations due to violence and fear of violence.

\textsuperscript{16} Utility in this context include human security.
Moreover, some of these indicators could also be influenced by other indicators. For instance, income opportunities in a country could be affected by long-term and gradual environmental degradation or environmental scarcity ($N_s$), and population pressure (size and growth) ($D_s$). These indicators represent environmental and demographic stress in a country, $W_{is} = W_{ts} (N_s D_s)$ (Naudé 2008). The migration decision could therefore also be influenced by livelihood strategies, income equality, population growth rate, rural-urban linkages as well as government policy such as land tenure systems, among others. However, this study does not consider some of these variables either because of multicollinearity problems or lack of appropriate data.

The deterministic random utility function of individuals, $i$, in a country, $j (j = m, s)$, can then be expressed as (see also Ibanez and Velez 2008 and Naudé 2008):

$$N_{ij} = aW_{ij} + \beta C_{ij} + \varphi P_{ij} + \mu F_{ij} + \eta H_{ij} + \gamma B_{ij} + \phi L_{ij} \quad (3):$$

The probability of household or individual, $i$, migration from country $s$ to $m$ at a particular time, $t$, is given by

$$Prob_{it} (migration) = Prob_{it} (aW_{int} + \beta C_{int} + \varphi P_{int} + \mu F_{int} + \eta H_{int} + \gamma B_{int} + \phi L_{int}) > aW_{ist} + \beta C_{ist} + \varphi P_{ist} + \mu F_{ist} + \eta H_{ist} + \gamma B_{ist} + \phi L_{ist} \quad (4):$$

Total expected emigration from country $s$ to country $m$ can be obtained by aggregating across all $N$-individuals or households, $i$, in country $s$ at any given time, $t$.

$$N^m_s = \sum_{i=1}^{N} prob_{st} (migrants) \quad (5):$$

Similarly, the total expected emigration from country $m$ to country $s$ is also given as:

$$N^s_m = \sum_{i=1}^{N} prob_{it} (migrants) \quad (6):$$

The expected net rate of migration in any country $j (j = s, m)$ will be given as:

$$M^n_j = M^m_s - M^s_m = M^n (W, C, P, F, H, R, B) \quad (7)$$

If $M^n_j > 0$ the country, $j$, will experience net immigration (immigration exceeds emigration) and if $M^n_j < 0$, the country will experience net emigration (emigration exceeds immigration).

In this study the focus is on net emigration or negative net migration; $M^n_j < 0$.

There are multiple time-varying and fixed effect determinates of negative net migration that could be used in the model in Equation (7).

Time-varying components are variables that vary with time, including economic opportunities ($W$), costs of migration ($C$), demographic ($N$) and environmental stress ($D$), food insecurity indicators ($F$), conflict and political instability variables ($P$), natural environmental hazards ($H$) as well as risk aversion ($R$). Time invariant determinants include variables that don’t vary with time such as crossing international borders ($B$) as well as other geographical and institutions specific to countries, fixed effect features.
Annex I.B: Data

The World Bank’s World Development Indicators dataset has reported net migration and outflow of migration from 323 countries or areas of origin\(^{17}\) in the world. This study has selected 88 countries or areas of origin that have experienced negative net migration at least once in a five-year interval spanning the period 1990-2015 and also those reporting levels of undernourishment in the same period; about 67 of them have experienced negative net migration in all periods. Furthermore, the outflow of migration has been analyzed for 125 countries or areas of origin.

The year 1990 is used as a base year and then five-year intervals are measured, due to availability of most of variables used in the analysis. More importantly, countries have started reporting undernourishment data since early 1990, but only at three or five-year intervals. Accordingly, the remaining variables are aggregated or averaged out in five-year intervals. While negative net migration and outflow of migration, as well as the incidence of armed conflict and natural disasters, are aggregated over the five-year intervals, the average values for GDP per capita and GDP growth are computed in five-year intervals over the same periods. The end year figures of each five-year intervals are also used for some variables such as population, as these figures are cumulated values of each successive year.

Annex I.C: Estimation strategies and results

Since the analysis is based on global panel data in five-year intervals spanning from 1990 to 2015, Equation (7) can be expressed in more explicit form as:

\[
m_{jt} = x_{jt} \beta + c_j + u_{jt}; \ j = 1, \ldots, N; \ t = 2, \ldots, T \quad (8)
\]

where \(m_{jt}\) is net migration per 1000 population from country \(j\) over period \(t\); \(x_{jt}\) is a 1×K vector of explanatory variables, \(c_j\) is time invariant unobserved country specific characteristics and \(u_{jt}\) is independent and identically distributed (i.i.d) random error term.

The dynamic panel estimator, specifically the ‘system GMM (generalized method of movement)’ estimator is the preferred option for such analysis as it deals with several econometric problems that may arise from estimating Equation (8) if typical linear estimators such as OLS (ordinary least squares) and 2SLS (two-stage least squares) are used. First, unobserved time-invariant country specific characteristics \((c_j)\), may be correlated with explanatory variables or cause omitted variable bias. Second, there may be a reverse causality between net migration and some of its determinants (Naudé 2008:13). For instance, while population pressure can lead to out-migration, out-migration could be used to relieve population pressure in a subsequent period. Similarly, net migration may affect economic opportunities by influencing GDP growth through changes in skilled labour. Third, there is a dynamic process in migration; the past level of migration may influence the present level because of either persistence effects (networks, or ‘family and friends’) or instability (returning migrants). The dynamic process in migration can be captured through lagged values of migration in the estimation equation.

Equation (8) can be re-written in dynamic format as the following in AR(1) model:

\[
m_{jt} - m_{jt-1} = \Delta m_{jt} = \gamma_t + \alpha m_{jt-1} + x'_{jt}\beta + c_j + u_{jt} \quad (9)
\]

It could be presented in a more convenient form as:

\[
m_{jt} = \gamma_t + (\alpha+1) m_{jt-1} + x'_{jt}\beta + c_j + u_{jt} \quad (10)
\]

First-differencing the Equation (10) can remove the time-invariant components, and eliminate the potential sources of omitted variables bias in the estimation.

\[
\Delta m_{jt} = \Delta \gamma_t + (\alpha+1) \Delta m_{jt-1} + \Delta x_{jt}\beta + \Delta u_{jt} \quad (11)
\]

---

\(^{17}\) The World Bank dataset for net migration is organized not only on existing countries but also included some areas or regions within the existing countries.
Where $\Delta m_{jt}$ is the difference in net migration over the period, and $\Delta \gamma_t$ is period-specific intercept terms, as given above.

Notwithstanding, taking the first-differencing in Equation (11) introduces a further problem as it will result in the regressors being correlated with the error term (for instance $\Delta m_{jt-1}$ depends on $u_{jt-1}$). This problem will be controlled using instrumental variables for the endogenous regressors. Arellano and Bond (1991) propose using the lagged levels of the regressors (e.g., $m_{jt-k}$) as instruments to control for endogeneity problems—and derive a difference GMM-estimator.

Subsequently it has been shown that when the number of time periods used is relatively small, the lagged levels of the regressors might not be good instruments for differenced variables, especially if the latter follows a random walk (Bond, Hoeffler and Temple 2001).

Following contributions from Arellano and Bover (1995) and Blundell and Bond (1998), it has now become standard to use a 'systems GMM estimator', which adds to the difference equation in (11), a further equation in levels, with the instruments in first differences. The 'system-GMM' estimator therefore consists of estimating both (in levels), using lagged differences (e.g., $\Delta m_{jt-k}$) as instruments, and (which is in first-differences), using lagged levels (e.g., $m_{jt-j}$) as instruments (see Arellano and Bover 1995; Blundell and Bond 1998). A benefit of this systems-equation approach as opposed to the 'difference GMM' estimator is that one can now include time-invariant regressors that would otherwise be differenced out (Roodman 2008). Table A3.1 presents drivers of international migration using a dynamic panel data spanning the period 1990 to 2015 in three estimation strategies (one-step, one-step and robust as well as two-step). The results are presented for countries or areas of origin that have experienced negative net migration at least once in the five-year intervals over the last 25 years (unbalanced panel) as well as for those countries that have experienced negative net migration for entire periods (balanced panel). Furthermore, the diagnostic analysis presented at the bottom of each table shows the overall specification to be sound: the number of instruments do not exceed the number of groups, the Sargan test for over-identifying restrictions on the instruments cannot reject the null that these restrictions are valid, and the Arellano-Bond test cannot reject the null of no second order autocorrelations.

---

18 One-step robust estimation correct for robust estimators of the covariance matrix of the parameter estimates, while one-step estimation does not. Both one-step robust and two-steps are consistent estimators, the later estimation is more asymptotically efficient as it uses the finite-sample correction procedures as weighing matrices developed by Windmeijer (2005).
Table A3.1: Net emigration per 1,000 population; System GMM Estimates, 1990–2015

<table>
<thead>
<tr>
<th></th>
<th>Unbalanced panel</th>
<th>Balanced panel</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>One-step (1)</td>
<td>One-step robust (2)</td>
</tr>
<tr>
<td>Intercept</td>
<td>−2.153 (2.142)</td>
<td>−2.153 (2.972)</td>
</tr>
<tr>
<td>Net migration (lag)</td>
<td>−0.235*** (0.061)</td>
<td>−0.235*** (0.063)</td>
</tr>
<tr>
<td>GDP per capita</td>
<td>1.818** (0.743)</td>
<td>1.818* (0.970)</td>
</tr>
<tr>
<td>GDP growth</td>
<td>1.120** (0.475)</td>
<td>1.120* (0.627)</td>
</tr>
<tr>
<td>GDP growth (lag)</td>
<td>0.218 (0.247)</td>
<td>0.218 (0.562)</td>
</tr>
<tr>
<td>Population (lag)</td>
<td>−0.191** (0.089)</td>
<td>−0.191** (0.073)</td>
</tr>
<tr>
<td>Undernourishment (lag)</td>
<td>−1.567*** (0.360)</td>
<td>−1.567* (0.869)</td>
</tr>
<tr>
<td>Incidence of armed conflict</td>
<td>−2.071* (1.147)</td>
<td>−2.071** (0.975)</td>
</tr>
<tr>
<td>Incidence of natural disasters</td>
<td>−0.017 (0.071)</td>
<td>−0.017 (0.030)</td>
</tr>
</tbody>
</table>

Diagnostics

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of observations</td>
<td>233</td>
<td>233</td>
<td>233</td>
<td>200</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>No. of groups</td>
<td>88</td>
<td>88</td>
<td>88</td>
<td>67</td>
<td>67</td>
<td>67</td>
</tr>
<tr>
<td>No. of instruments</td>
<td>39</td>
<td>39</td>
<td>39</td>
<td>39</td>
<td>39</td>
<td>39</td>
</tr>
</tbody>
</table>

*p<0.1; **p<0.05; ***p<0.01; Note: Robust standard errors in brackets

Sargan test of over identifying restrictions; unbalanced panel: $\chi^2$ (28) = 48.17; Prob > $\chi^2$ = 0.019; and balanced panel: $\chi^2$ (28) = 28.75; Prob > $\chi^2$ = 0.451

Hansen test of over identifying restrictions; unbalanced panel: $\chi^2$ (28) = 24.81; Prob > $\chi^2$ = 0.638; and balanced panel: $\chi^2$ (28) = 23.97; Prob > $\chi^2$ = 0.552

Arellano–Bond test for second order autocorrelation in first differences: $z$ = 0.70; Pr > $z$ = 0.942; $z$ = 0.59; Pr > $z$ = 0.552
Table A3.2: Refugees per 1,000 population:  
System GMM Estimates, 1990-2015

<table>
<thead>
<tr>
<th></th>
<th>One-step (1)</th>
<th>One-step robust (2)</th>
<th>Two-step (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.191</td>
<td>0.191</td>
<td>0.103</td>
</tr>
<tr>
<td></td>
<td>(0.160)</td>
<td>(0.192)</td>
<td>(0.137)</td>
</tr>
<tr>
<td>Log refugee (lag)</td>
<td>0.272***</td>
<td>0.272***</td>
<td>0.247***</td>
</tr>
<tr>
<td></td>
<td>(0.065)</td>
<td>(0.079)</td>
<td>(0.053)</td>
</tr>
<tr>
<td>Log GDP per capita</td>
<td>0.074</td>
<td>0.074</td>
<td>-0.273**</td>
</tr>
<tr>
<td></td>
<td>(0.150)</td>
<td>(0.198)</td>
<td>(0.137)</td>
</tr>
<tr>
<td>Log GDP growth</td>
<td>0.054</td>
<td>0.054</td>
<td>0.186**</td>
</tr>
<tr>
<td></td>
<td>(0.099)</td>
<td>(0.114)</td>
<td>(0.084)</td>
</tr>
<tr>
<td>Log GDP growth (lag)</td>
<td>-0.193***</td>
<td>-0.193**</td>
<td>-0.019</td>
</tr>
<tr>
<td></td>
<td>(0.067)</td>
<td>(0.089)</td>
<td>(0.061)</td>
</tr>
<tr>
<td>Log population (lag)</td>
<td>0.731</td>
<td>0.731</td>
<td>0.230</td>
</tr>
<tr>
<td></td>
<td>(1.068)</td>
<td>(1.174)</td>
<td>(0.913)</td>
</tr>
<tr>
<td>Undernourished (% of population) (lag)</td>
<td>1.899***</td>
<td>1.899**</td>
<td>1.521***</td>
</tr>
<tr>
<td></td>
<td>(0.577)</td>
<td>(0.792)</td>
<td>(0.557)</td>
</tr>
<tr>
<td>Incidence of armed conflict (&gt;= 25 death)</td>
<td>0.397***</td>
<td>0.397**</td>
<td>0.160</td>
</tr>
<tr>
<td></td>
<td>(0.147)</td>
<td>(0.193)</td>
<td>(0.108)</td>
</tr>
<tr>
<td>Incidence of natural disaster (in #)</td>
<td>-0.015</td>
<td>-0.015</td>
<td>-0.003</td>
</tr>
<tr>
<td></td>
<td>(0.011)</td>
<td>(0.017)</td>
<td>(0.013)</td>
</tr>
</tbody>
</table>

**Diagnostics**

- No. of observations: 355
- No. of groups: 125
- No. of instruments: 30

*p<0.1; **p<0.05; ***p<0.01; Note: Robust standard errors in brackets

Sargan test of over identifying restrictions at global level: $\chi^2 (19) = 59.74$; Prob > $\chi^2 = 0.000$

Hansen test of over identifying restrictions at global level: $\chi^2 (19) = 25.63$; Prob > $\chi^2 = 0.141$

Arellano–Bond test for second order autocorrelation in first differences at global level: $z = -0.99$; Pr > $z = 0.320$
Table A3.3: Refugees per 1,000 population by type of armed conflict: System difference GMM Estimates, 1990-2015

<table>
<thead>
<tr>
<th></th>
<th>One-step (1)</th>
<th>One-step robust (2)</th>
<th>Two-step (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log refugee (lag)</td>
<td>0.225*** (0.031)</td>
<td>0.225** (0.092)</td>
<td>0.209*** (0.026)</td>
</tr>
<tr>
<td>Extra systemic armed conflict with at least 25 battle–deaths</td>
<td>0.000 (0.000)</td>
<td>0.000 (0.000)</td>
<td>0.000 (0.000)</td>
</tr>
<tr>
<td>Extra systemic armed conflict with at least 25 battle–deaths (lag)</td>
<td>0.000 (0.000)</td>
<td>0.000 (0.000)</td>
<td>0.000 (0.000)</td>
</tr>
<tr>
<td>Inter–state armed conflict with at least 25 battle–deaths</td>
<td>0.051 (0.161)</td>
<td>0.051 (0.097)</td>
<td>0.118 (0.106)</td>
</tr>
<tr>
<td>Inter–state armed conflict with at least 25 battle–deaths (lag)</td>
<td>–0.030 (0.149)</td>
<td>–0.030 (0.112)</td>
<td>–0.041 (0.039)</td>
</tr>
<tr>
<td>Internal conflict with at least 25 battle–deaths</td>
<td>0.035* (0.020)</td>
<td>0.035 (0.048)</td>
<td>0.035*** (0.013)</td>
</tr>
<tr>
<td>Internal conflict with at least 25 battle–deaths (lag)</td>
<td>0.136*** (0.022)</td>
<td>0.136*** (0.035)</td>
<td>0.135*** (0.017)</td>
</tr>
<tr>
<td>Internationalized internal conflict with at least 25 battle–deaths</td>
<td>0.283*** (0.055)</td>
<td>0.283*** (0.087)</td>
<td>0.346*** (0.031)</td>
</tr>
<tr>
<td>Internationalized internal conflict with at least 25 battle–deaths (lag)</td>
<td>0.201*** (0.037)</td>
<td>0.201*** (0.059)</td>
<td>0.190*** (0.022)</td>
</tr>
</tbody>
</table>

**Diagnostics**

<table>
<thead>
<tr>
<th></th>
<th>One-step</th>
<th>One-step robust</th>
<th>Two-step</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of observations</td>
<td>564</td>
<td>564</td>
<td>564</td>
</tr>
<tr>
<td>No. of groups</td>
<td>188</td>
<td>188</td>
<td>188</td>
</tr>
<tr>
<td>No. of instruments</td>
<td>36</td>
<td>36</td>
<td>36</td>
</tr>
</tbody>
</table>

*p<0.1; **p<0.05; *** p<0.01; Note: Robust standard errors in brackets
Sargan test of over identifying restrictions at global level: \( \chi^2 (22) = 56.24; \) Prob \( > \chi^2 = 0.000 \)
Hansen test of over identifying restrictions at global level: \( \chi^2 (19) = 14.64.5; \) Prob \( > \chi^2 = 0.007 \)
Arellano–Bond test for second order autocorrelation in first differences at global level: \( z = -0.74; \) Pr \( > z = 0.459 \)
Table A3.4: Probit regression results for the likelihood of armed conflict, 1990-2015

<table>
<thead>
<tr>
<th>Coefficient (SD. E)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Net migration</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Proportion of undernourished (% of total population)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Incidence of natural disaster (1=yes)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>GDP per capita</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>GDP growth</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Pseudo R2</td>
</tr>
</tbody>
</table>

*p<0.1; **p<0.05; *** p<0.01; Note: Robust standard errors in brackets

Table A3.5: Intensity of armed conflict; System difference GMM Estimates, 1990-2015

<table>
<thead>
<tr>
<th></th>
<th>One-step</th>
<th>One-step</th>
<th>Two-step</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>robust (2)</td>
<td>(3)</td>
</tr>
<tr>
<td>Cons</td>
<td>-0.459*</td>
<td>-0.459</td>
<td>-0.098</td>
</tr>
<tr>
<td></td>
<td>(0.253)</td>
<td>(0.437)</td>
<td>(0.103)</td>
</tr>
<tr>
<td>Incidence of armed conflict (&gt;– 25 death) (lag)</td>
<td>-0.363*</td>
<td>-0.363</td>
<td>-0.387***</td>
</tr>
<tr>
<td></td>
<td>(0.201)</td>
<td>(0.219)</td>
<td>(0.073)</td>
</tr>
<tr>
<td>Incidence of natural disaster (in #)</td>
<td>0.023*</td>
<td>0.023</td>
<td>0.006</td>
</tr>
<tr>
<td></td>
<td>(0.012)</td>
<td>(0.028)</td>
<td>(0.009)</td>
</tr>
<tr>
<td>GDP per capita</td>
<td>0.073</td>
<td>0.073</td>
<td>-0.024</td>
</tr>
<tr>
<td></td>
<td>(0.085)</td>
<td>(0.127)</td>
<td>(0.037)</td>
</tr>
<tr>
<td>GDP growth</td>
<td>-0.005</td>
<td>-0.005</td>
<td>-0.018</td>
</tr>
<tr>
<td></td>
<td>(0.054)</td>
<td>(0.072)</td>
<td>(0.013)</td>
</tr>
<tr>
<td>Proportion of undernourished (% of total people)</td>
<td>0.028</td>
<td>0.028</td>
<td>0.023**</td>
</tr>
<tr>
<td></td>
<td>(0.029)</td>
<td>(0.035)</td>
<td>(0.011)</td>
</tr>
<tr>
<td>Net emigration (lag)</td>
<td>0.010</td>
<td>0.010*</td>
<td>0.004**</td>
</tr>
<tr>
<td></td>
<td>(0.006)</td>
<td>(0.005)</td>
<td>(0.002)</td>
</tr>
</tbody>
</table>

*Diagnostics*

<table>
<thead>
<tr>
<th></th>
<th>One-step</th>
<th>One-step</th>
<th>Two-step</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>robust (2)</td>
<td>(3)</td>
</tr>
<tr>
<td>No. of observations</td>
<td>232</td>
<td>232</td>
<td>232</td>
</tr>
<tr>
<td>No. of groups</td>
<td>88</td>
<td>88</td>
<td>88</td>
</tr>
<tr>
<td>No. of instruments</td>
<td>39</td>
<td>39</td>
<td>39</td>
</tr>
</tbody>
</table>

*p<0.1; **p<0.05; *** p<0.01; Note: Robust standard errors in brackets

Sargan test of over identifying restrictions at global level: $\chi^2 (30) = 22.53$; Prob $> \chi^2 = 0.834$

Hansen test of over identifying restrictions at global level: $\chi^2 (30) = 22.35$; Prob $> \chi^2 = 0.841$

Arellano–Bond test for second order autocorrelation in first differences at global level: $z = 1.10$; Pr $> z = 0.273$
References


Photo credits
The World Food Programme undertook this study to determine the role that food security and other factors play in compelling cross-border migration. Drawn from quantitative and qualitative research, the study gives voice to people who have left their countries of origin by featuring first-person accounts of migrants from ten different countries. These accounts were drawn from interviews that took place in Turkey, Jordan, Lebanon, Italy and Greece.

The study finds that countries with the highest level of food insecurity and conflict have the most significant outward migration of refugees. The study also determined that once a migrant’s journey has begun, food and economic security are critical factors in deciding to continue a journey or settle in a particular location.

The report puts forth recommendations for policymakers and humanitarian organizations involved in the preparation and response to international migration with a focus on forced displacement. Given the unprecedented surge of forced displacement in recent years, the findings underscore the need to prevent conflict and invest in food security at or near people’s place of origin. Doing so may prevent further displacement, reducing forced onward migration flows, result in more cost-effective humanitarian interventions and yield greater socioeconomic benefits over the long term.