Department for International Development

UNDERSTANDING THE IMPACT OF LIVELIHOOD OPPORTUNITIES AND INTERVENTIONS ON MIGRATION PATTERNS

RAPID EVIDENCE ASSESSMENT, JANUARY 2018

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Contributions
The opinions expressed in this publication are not necessarily those of the Department of International Development. Responsibility for the views expressed remains solely with the authors.

LIST OF ABBREVIATIONS

Assisted Voluntary Return and Reintegration (AVRR)

Bantuan Langsung Tunai (BLT)

Conditional Cash Transfer (CCT)

East Asia and the Pacific (EAP)

Europe and Central Asia (ECA)

Indonesian Family Life Survey (IFLS)

Latin America and the Caribbean (LAC)

Middle East and North Africa (MENA)

Migration Policy Institute (MPI)

New Economics of Migration (NEM)

Purchasing Power Parity (PPP)

Rapid Evidence Assessment (REA)

South Asia (SA)

Sub-Saharan Africa (SSA)

Sustainable Livelihoods Framework (SLF)

UK Department for International Development's (DFID)

Unconditional Cash Transfer (UCT)

EXECUTIVE SUMMARY

While the interlinkages between migration and development have been studied for decades, the field has thus far lacked a robust evidence base to examine *how and under what conditions* livelihood interventions and livelihood opportunities impact migration. As a result, development actors generally face critical knowledge gaps regarding how their actions may impact migration flows.

This Rapid Evidence Assessment (REA) aims to fill part of this gap by examining the best available evidence from 121 quantitative and qualitative studies conducted in low- and low middle-income countries[1] in the past fifteen years. It analyses the findings from these studies through the prism of two core research questions:

1. What effect does the availability of ***sustainable livelihood opportunities*** have on international migration from low-income or low middle-income countries, both within the region and to higher-income regions? Do these effects differ according to the type of work available (e.g. formal or informal, self-versus wage-employment, high or low quality jobs), and socio-demographic factors?

2. To what extent are ***livelihood interventions*** in origin, transit, or first asylum countries likely to have an identifiable impact on migration decisions among targeted groups and communities? What is the likely effect of different types of livelihood interventions applied?

In order to examine the evidence on these research questions systematically, Migration Policy Institute (MPI) adopted a modified version of the UK Department for International Development's (DFID) Sustainable Livelihoods Framework (SLF). According to this framework, three factors affect the *scope* of livelihood opportunities available to households or individuals: (a) **livelihood assets** (such as human or financial capital); (b) **vulnerability context** (describing concerns such as availability of employment, conflict, or environmental degradation); and (c) **structures and processes** (such as the legal and policy frameworks in different countries).

To the degree possible, this analysis investigates how, when, and why livelihood opportunities, strategies and outcomes interact with the three phases of migration: (a) aspiration to migrate; (b) decision to migrate; and (c) actual migration. In particular, it considers to what extent the elements of the livelihoods framework serve as necessary or facilitating factors that allow individuals to cross each of these three thresholds.

MPI initially identified 509 studies potentially relevant to the research questions. This was narrowed to a final total of 172 studies based on set inclusion and exclusion criteria. The studies were then evaluated using a quality assessment framework and coded in an Excel

[1] In addition, studies on Jordan were included due to the country's key role in the Syrian Refugee Response. Studies covering livelihood interventions in Mexico were also included because they comprised a large proportion of the evidence base on interventions specifically.

database. Low quality studies were excluded from the analysis, leaving a total of 121 studies. The MPI team assessed the quality of the evidence base as a whole against four criteria: overall quality of the studies reviewed, size of the evidence available, context in which the studies were conducted, and consistency of the findings.

While the majority of people worldwide do not migrate—just over three percent of the world population lived outside their country of origin in 2015[2]—the REA found that among those who do move, livelihood opportunities and interventions affect migration aspirations, decisions, and patterns. But how these effects occur is highly context-specific and difficult to predict. In a situation where aspirations already exist, removing practical constraints (like financial barriers) may increase migration. In other situations, however, the same change in livelihood conditions may have a different effect on migration patterns.

FINDINGS ON LIVELIHOOD OPPORTUNITIES

The findings on livelihood opportunities are based on a very large body of evidence (113 studies) across all six world regions (as defined by the World Bank) and are highly varied in their research approaches and findings, though they are consistent in finding that livelihood opportunities (broadly defined) have an impact on migration patterns. Evidence in support of most of these findings comes from a mix of studies tracking individuals' behaviour over time (longitudinal data) and surveys that measure aspirations or behaviour at a single point in time (cross-sectional data). By way of exception, studies on perceptions of employment and livelihood opportunities (finding 3) drew only on cross-sectional data. Further details regarding the quality, consistency, size, and geographic coverage of the evidence is presented in relationship with specific findings, below.

The evidence on livelihood opportunities suggests several initial findings:

1. ***An increase in livelihood assets facilitates more actual migration:*** A large and consistent body of evidence finds that having greater financial resources or more extensive social networks plays an important role in facilitating actual migration among those who already aspire to move. The literature suggests that without the ability to fund a migration journey (financial capital) or information on how to undertake migration (social capital) actually migrating is difficult if not impossible.
2. ***More education may lead to more migration, though enrolment in school may decrease migration in the short term:*** Individuals with at least some secondary schooling appear more likely to migrate, and aspire to migrate, than those with limited education or post-secondary or tertiary education. The research is not clear, however, on the reasons underlying this trend. Researchers have proposed several hypotheses: while those with more education may be more likely to aspire to migrate, educated individuals may also have more opportunities to migrate. Data

[2] See Migration Policy Institute, "International Migrants by Country of Destination, 1960-2015," accessed 28 August 2017, http://www.migrationpolicy.org/programs/data-hub/charts/international-migrants-country-destination-1960-2015.

from other studies suggest, though, that being enrolled in school may decrease migration, at least in the short term.

3. ***A perceived lack of employment or livelihood opportunities may contribute to migration aspirations:*** There is an emerging consensus in the evidence that a perceived lack of employment or livelihood opportunities can contribute to migration aspirations. Much of this evidence comes from first asylum countries, however, limiting its generalizability to other contexts. Moreover, most studies relied on descriptive statistics and cross-sectional surveys, and thus very few were able to provide evidence on whether these aspirations translated into actual migration (whether from a first asylum or origin country).
4. ***A desire for a higher salary or better career prospects can be a driver of migration aspirations, particularly for the high-skilled:*** Several high-quality quantitative and qualitative studies provide evidence that a desire for a better salary and better career advancement opportunities is correlated with aspiring to or actually migrating. However, the size and geographic coverage of the evidence is small, and is most conclusive for those employed in the medical field.
5. ***In situations of conflict or environmental degradation, migration may be part of a household level adaptation strategy to mitigate risk:*** A combination of quantitative and qualitative studies on the effects of negative environmental trends and conflict found consistent evidence that decisions regarding migration in these situations are often made at the household, rather than individual level. In contexts where existing livelihood strategies have become insufficient to meet a household's needs or goals, because of environmental degradation or the loss of key assets due to conflict for example, households may choose to mitigate economic risk by engaging in migration as an alternative or complementary livelihood strategy. The exact migration strategy a household chooses, including how to migrate and how far, appear to be shaped by the costs of the journey and the financial resources available.
6. ***Negative environmental shocks and long-term trends are likely to lead to internal rather than international migration:*** Where livelihoods have been disrupted by natural shocks or environmental degradation, the studies consistently pointed to a preference on the part of households to remain close to their communities of origin. The REA identified consistent evidence that long-term environmental trends may increase internal migration aspirations and actions; the evidence on international migration, however, was inconclusive.

Broadly, the evidence on livelihood opportunities clearly highlighted the highly contextual nature of migration aspirations, decisions, and actions. While some broad trends can be observed across countries, the variability in how migration patterns evolve in specific circumstances means it may be problematic to assume that a particular livelihood factor will translate into more or less migration across contexts. Rather, the evidence provided by the studies makes it clear that migration aspirations, decisions, and actions are inherently shaped by:

- perceptions about the availability and desirability of strategies locally to meet livelihood needs and goals, and similarly, perceptions about the desirability of migration as an alternative or supplemental livelihood strategy;
- the information households and individuals have about specific migration opportunities available to them and how to realise their migration aspirations;
- the actual costs of migration (in both financial and human security terms) and the ability and willingness of households or individuals to meet these costs.

FINDINGS ON LIVELIHOOD INTERVENTIONS

Viewed broadly, livelihood interventions are typically designed to affect one or several discrete elements of the sustainable livelihoods framework—such as livelihood assets like financial or human capital or access to markets for labour or goods. MPI sought to identify evidence on four categories of livelihood intervention: (1) interventions that increase financial resources such as cash transfers and microfinance, (2) interventions that seek to improve human capital assets through education or training, (3) programmes to improve productive capacity including business development and agricultural support, and (4) employment support initiatives such as job matching or cash-for-work programmes.

The body of evidence identified on livelihood interventions was much more limited in size, geographic scope, and consistency than the evidence on livelihood opportunities. Very few livelihood interventions have been evaluated for their effects on international migration, and the REA identified just 17 high or moderate quality studies on livelihoods interventions and migration. Few or no studies were identified dealing with business or agricultural support programmes or employment initiatives.

Most of the existing evidence is on financial programmes, though the findings are inconsistent. While some evaluations found that conditional cash transfers limited actual migration among beneficiaries, others found the programmes had no observable effect. When unconditional financial programmes (i.e. unconditional cash transfers and microfinance) are considered together, there is limited evidence that these interventions may facilitate actual migration. More evidence is needed, however, to test the robustness of this finding.

The REA also identified a very small number of primarily qualitative or cross-sectional studies on the effects of educational programmes. These studies provide some evidence that education and training programmes may increase beneficiaries desire to move, if they are unable to use their new skills locally after the programme concludes. Much more research is needed, however, to corroborate this finding in other geographic areas and with other programmes.

EVIDENCE GAPS AND RECOMMENDATIONS

The REA identified several important gaps in the evidence base. First, the methodological and conceptual approaches which studies use to analyse key concepts, like migration, and relationships between factors are extremely varied, making comparisons across studies

difficult. The lack of comparability may be due in part to the relatively poor quality of data on migration patterns in origin and transit countries. Relatively few studies used longitudinal data sets. Many relied instead on cross-sectional survey data on migration aspirations or retrospective migration histories which present challenges in terms of establishing causation and controlling for recall bias.

Second, relatively few studies provided information on *how* migration occurs. Very little information was available on the destinations migrants chose, the duration of migration, or the type of migration undertaken (e.g. regular or irregular). Where such information was provided, studies generally relied on the few longitudinal data sets available on migration patterns (e.g. the Chitwan Valley Family Survey in Nepal), further illustrating the need for better data collection in origin countries on migration.

Third, research on livelihoods and forced migration[3], particularly in first asylum countries, is underdeveloped compared to other contexts. Most studies rely on cross-sectional surveys and descriptive statistics to reach conclusions on migration aspirations and decisions in forced migration situations. The REA identified very few high-quality quantitative or qualitative studies on forced migration patterns and livelihoods. This may be due in part to the difficulty of collecting robust data in forced migration contexts.

Finally, most studies examined by the REA were conducted in countries with relatively high levels of migration. Such contexts may be attractive to researchers as they allow for a large research sample to study the variety and relative weight of factors, especially at community, household, and individual levels, that explain why a particular household/household member migrates and in which manner. However, they also bring along the risk of selection bias, and some factors may go unidentified or their assumed impact may be over/underestimated due to the lack of a proper comparison group. This potential risk and how it may affect the reliability and validity of findings are not sufficiently recognised in present studies. Research into contexts with less migration, as well as cross-context/country research, would thus strengthen the evidence base. More qualitative research on views of migration and livelihoods in low migration contexts would be particularly valuable for developing a clearer picture of how migration aspirations and decisions evolve.

The REA identified several specific recommendations for addressing these evidence gaps:

- More investment in comprehensive evaluations of livelihood interventions that consider the effects on migration;
- Better evidence on the medium- and long-term effects of livelihoods opportunities and interventions, including by investing in more longitudinal data collection;
- More robust data collection on the effect of livelihoods on migration in forced migration contexts;

[3] Forced migration is defined as movement that is the result of compulsion due to external factors. This term is used to refer to flows of refugees, Internally Displaced Persons, asylum seekers, and those obligated to move but whose grounds for flight are not recognised under international law.

- More clarity and consistency across studies in how key concepts are defined and measured, including migration;
- Research within and across a greater variety of contexts, including those with low migration rates;
- More consideration of the effects of intermediary variables such as gender on the relationship between livelihoods and migration.

CONTENTS

1.0 INTRODUCTION

In the development field, interventions that enable individuals and families to build sustainable livelihoods have garnered particular interest—namely because of their potential to offer long-term, durable solutions to alleviate protracted situations of poverty and dependence. Livelihood interventions have also gained prominence in migrant and refugee-hosting contexts in recent years as a potential way to reduce pressures to undertake irregular and unsafe migration and ensure when migration does occur it is regular, safe, and well-managed, per the Sustainable Development Goals. Such efforts are driven by the theory that some individuals might not choose to move in an irregular and unsafe manner if they had the means to earn a living and meet their livelihood aspirations closer to home. However, the evidence linking development, livelihood interventions, and migration has been mixed.

While the majority of people worldwide do not migrate—just over three percent of the world population lived outside their country of origin in 2015—the REA found that among those who do move, livelihood opportunities and interventions can affect migration aspirations, decisions, and patterns.

If there is any consensus within the migration research community, it is that the relationship between human and economic development and migration is complex and needs to be studied further. Migration patterns and trends are multifaceted, non-linear, and influenced by a host of direct and indirect factors. While increased development may indeed reduce migration aspirations for some groups, it may actually facilitate increased mobility for other groups—as only those with a certain level of resources can afford to move. A key question for researchers and practitioners is therefore *how and to what extent* development interventions affect people's motivations—and resources—for migration, and *on what timetable*. Does development change the propensity to undertake certain types of migration, particularly irregular migration? And do the effects of development, and livelihood interventions specifically, differ over short-, medium-, and long-term? Yet even if these effects can be measured or observed, it remains difficult to disentangle the impact of livelihood interventions from other development-related factors shaping people's livelihood strategies, of which migration may be one.

So far, the development field has lacked a robust evidence base on the outcomes of livelihood interventions; and even less is understood about the effects of livelihood efforts on migration specifically. As a result, development actors are often faced with key gaps in their understanding of how their actions may impact migration flows.

This report aims to fill part of this information gap by conducting a Rapid Evidence Assessment (REA) on the connection between economic opportunities, livelihood development efforts, and international migration patterns. To achieve this, MPI identified the most relevant literature published within the last fifteen years that sheds light on the various ways in which development and development interventions may affect people's ability and motivation to migrate, and how this differs among different groups and geographic contexts. The resulting analysis reflects MPI's evaluation of 121 medium- and

high-quality academic studies and research reports with relevant findings on the ways in which livelihood opportunities and interventions may affect the migration decisions of individuals and families.

The report begins by setting out the analytical framework used to evaluate the evidence against the research questions and methodology for the search and quality assessment phases of the review. It then assesses the overall strength of the body of the evidence and considers whether the evidence is of sufficient strength to provide answers to the core research questions. The report concludes by analysing the significance of this evidence for livelihood development efforts, and proposing avenues for further research.

2.0 CONCEPTUAL FRAMEWORK

The REA set out to answer two core research questions:

1. What effect does the availability of ***sustainable livelihood opportunities*** have on international migration from low-income or low middle-income counties, both within the region and to higher-income regions? Do these effects differ according to the type of work available (e.g. formal or informal, self- versus wage-employment, high or low quality jobs), and socio-demographic factors?

2. To what extent are ***livelihood interventions*** in origin, transit, or first asylum countries likely to have an identifiable impact on migration decisions among targeted groups and communities? What is the likely effect of different types of livelihood interventions applied?

In order to examine the evidence on these research questions systematically, MPI adopted a modified version of the UK Department for International Development's (DFID) Sustainable Livelihoods Framework (SLF) (see Figure 1).[4] As outlined in Figure 1, three factors affect the *scope* of livelihood opportunities available to households or individuals – in either the country of origin or, for those who have migrated already, the country of transit:

- ***Livelihood assets:*** Assets include the human, social, natural, physical, and financial capital of households and individuals. Education and skills, social networks, land ownership, income, and savings are examples of these different kinds of assets.
- ***Vulnerability context:*** Individuals or households (continuously) develop livelihoods within a broader economic, environmental and political context, which is subject to trends, potential shocks and seasonal shifts (i.e. macro-level). This is captured in the framework under the "vulnerability context." Trends may include gradual environmental changes, broader economic conditions, and demographic and technological shifts. Shocks include natural events (e.g. a flood), conflict, rapid economic changes, and health emergencies. Finally, seasonality includes seasonal fluctuations in prices, environmental conditions, the availability of employment and other factors.
- ***Structures and processes:*** At the meso-level, structures and processes influence the build-up and demise of livelihood opportunities. These comprise the legal and policy framework, the political establishment, cultural practices, power relationships between social groups, and the actions pursued by governmental and non-governmental organisations. All of these factors determine how assets are accessed and who eventually accesses them. Laws and policies that restrict access to (free) education to certain social groups within society (e.g. boys or young men) are an example of a "social structure"; administrative practices that *de facto* prevent a member of a low socio-economic class or a migrant to obtain the right permit to enter the labour market illustrate the effect of a "process".

[4] See Department for International Development (DFID), *Sustainable Livelihood Guidance Sheets*, (London: DFID, April 1999), http://www.eldis.org/vfile/upload/1/document/0901/section2.pdf

Depending on the livelihood opportunities available, individuals or households will develop particular livelihood strategies and obtain certain livelihood outcomes.

Livelihood interventions consist of programmes that aim to improve the capacity of the target group to meet its (basic) needs and that are designed and delivered by governmental and/or non-governmental actors. Livelihood interventions pursue this goal by seeking to impact the three abovementioned factors. As such, interventions may directly or indirectly build up the assets of beneficiaries (through education and training, income support, or micro-finance), reduce the vulnerability context (by mitigating environmental degradation, for example), and/or by altering structures or processes (such as by working to improving access to markets or land-use rights).

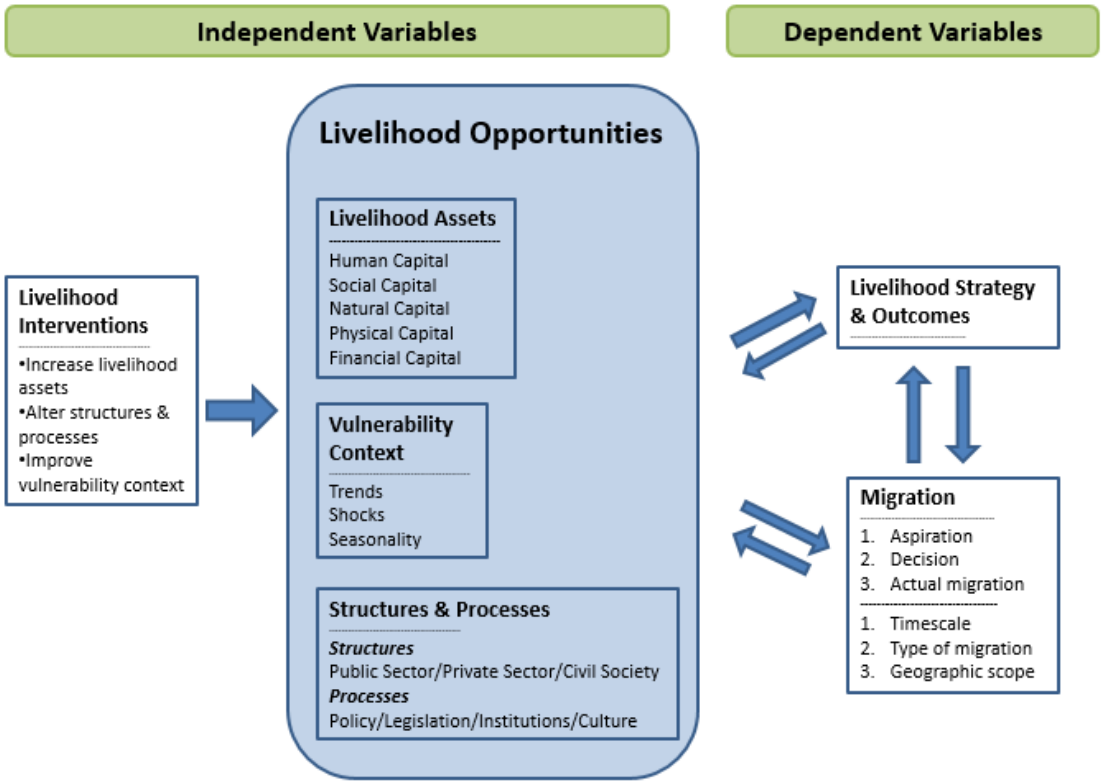

Figure 1. Modified Secure Livelihoods Framework

Finally, the analytical framework investigates how, when, and why livelihood opportunities, strategies and outcomes interact with migration. Specifically, the REA considers how livelihoods factors interact with three dimensions of the migration journey:

- ***Aspiration to migrate:*** This constitutes the mere wish or desire to migrate, without any concrete action taken to pursue this dream.
- ***Decision to migrate:*** Here the individual or household makes an active decision to migrate, potentially preceded by a cost-benefits analysis, and subsequently takes concrete steps to implement the decision (e.g. choose a destination, a migration channel and route, etc.).

- ***Actual migration:*** This refers to the actual movement from location x to location y, by individuals, (particular) social groups or populations.

In considering the evidence, the analysis strives to make clear which dimension a particular study has measured and any limitations of the particular measure used.[5] In addition, the REA seeks to document the differential impact of livelihood opportunities on migration decisions from particular social groups (e.g. gender, education or age), when the evidence allows. Similarly, when studies shed light on the specifics of the migratory movement these findings are also presented, including factors such as:

- ***Time period over which migration occurs:*** How long do migrants remain abroad? Is migration temporary or long-term, or do migrants circulate between origin and destination?
- ***Travel/entry channel used to migrate:*** Do migrants move through legal channels, such as through family reunification or labour recruitment programmes, or does migration occur without authorisation? Where migration occurs regularly,[6] which channels are used? To what extent is migration forced versus voluntary?
- ***Geographic scope of migration:*** Migration can occur along a geographic continuum. To what extent is migration internal (within the same country) or international (either to a neighbouring country or to a destination farther afield)?

Livelihood opportunities and interventions may interact with the three migration thresholds in a number of different ways, depending on the particular context and circumstances of the individual or household. Trends such as declining agricultural productivity or shocks such as natural disasters, which alter the vulnerability context, may reduce the opportunities locally to sustain a livelihood and raise the prospect of migration as a desirable alternative livelihood strategy. Assets may also play a role, with financial capital providing the means to act on migration desires and human capital endowments often determining whether an individual can access a regular migration opportunity (more easily available to skilled migrants) or must resort to irregular migration. The studies considered by the REA have contributed to building the evidence base on how livelihood opportunities (shaped by assets, context, and structures and processes) promote or deter the crossing of the thresholds leading to actual migration, and how livelihoods interventions alter (or leave unchanged) this calculus.

[5] As will be detailed in the analysis, the distinction between migration aspirations, decisions, and actual migration is not always made clear in the studies reviewed. Moreover, a study's choices about which of these factors is measured and how have clear implications for the validity and generalisability of the findings. The analysis seeks to draw out these nuances, where relevant.

[6] Regular migration is defined as movement that takes place within the regulatory norms of the sending, transit and receiving countries, through a legally established international channel or program established by the country of destination. This definition is adapted from Richard Perruchoud and Jillyanne Redpath-Cross, eds., Glossary on Migration, 2nd Edition(Geneva: International Organization for Migration, 2011), 54, https://publications.iom.int/system/files/pdf/iml25_1.pdf.

3.0 METHODOLOGY

MPI used a structured database search protocol, combined with expert interviews and snowballing, to identify a total of 509 studies potentially relevant to the research questions. This was narrowed to a final total of 172 studies based on set inclusion and exclusion criteria. The studies were then evaluated using a quality assessment framework and coded in an Excel database. Ultimately, 121 medium- and high-quality studies were included in the analysis.

This section provides further detail on the methodology used to find and evaluate the evidence including the search criteria, quality assessment framework, and analytical protocol. The complete selection and evaluation process is mapped in the PRISMA diagram in Figure 2.

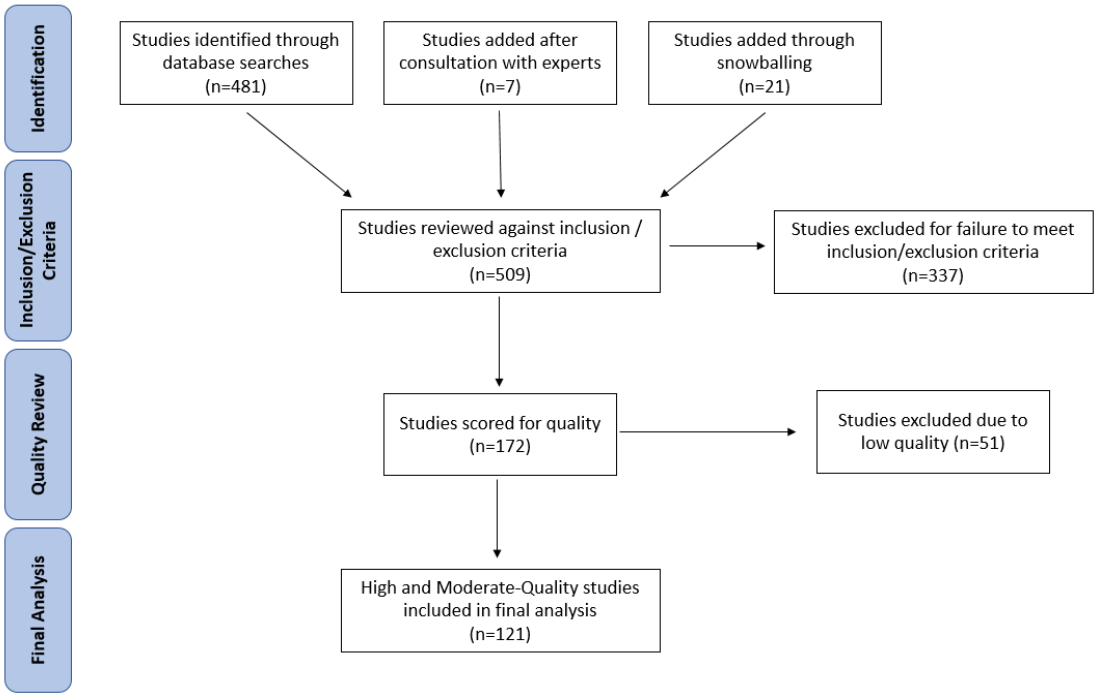

Figure 2. PRISMA diagram analysis of evidence.

3.1 SEARCH PHASE AND PROTOCOL

The MPI research team began with a comprehensive search of academic and open source databases relevant to the fields of migration and development. In order to identify additional grey literature and non-academic publications relevant to the REA, MPI also conducted a search of publications by migration and development research organisations. Table 1, below, presents the full list of sources MPI consulted during the database search.

DATABASES	RESEARCH ORGANISATIONS
Google Scholar	Secure Livelihoods Research Consortium
RePEc	Migration Policy Institute
	Institute of Labour Economics (IZA)
Active Learning Network for Accountability and Performance in Humanitarian Action (ALNAP)	University of Oxford - International Migration Institute - Refugee Studies Centre - Centre on Migration, Policy, and Society
Academic Search Complete	Organisation for Economic Co-operation and Development
	Centre for Research and Analysis of Migration University College London
Research for Development	Institute of Development Studies, University of Sussex
3iE (International Initiative for Impact Evaluation)	Center for Global Development
	UN High Commissioner for Refugees
EPPI-Centre	World Bank
Overseas Development Institute	International Organization for Migration
Migrating out of Poverty Database	

Table 1. List of sources.

MPI used a total of 158 key words for the database searches. Key words were formulated based on the SLF and included relevant terms within the categories of livelihood context, livelihood assets, and livelihood interventions. These were paired with synonyms for "migration" and "driver." (See Table 2 below for numbers of key words by category. A full list of key words is included in Appendix A.) Combinations of key words were turned into full search strings including at least one word each for migration, driver, and livelihoods asset or context. In order to return the most relevant results, MPI adapted the search function and key words depending on the source. For certain databases, strings had to be modified for length to fit the text limitations of the search function.

Key word category	Number of words
Synonyms for migration	6
Drivers of migration	13
Livelihood context	70
Livelihood assets	47
Livelihood interventions	22

Table 2. Key words used in literature search.

MPI tested the keywords and search strings across three academic search databases during an initial scoping phase to ensure the search strategy returned relevant evidence. As a result of the test, the team added several new words and excluded others, such as "integration"

that produced a high volume of irrelevant results. MPI agreed upon the final list of key words in consultation with migration and livelihood advisers from DFID.

The final searches of 22 databases and research organisations generated a total of 10,433 hits. After brief reviews of publication titles and abstracts, the list was narrowed to 481. To ensure the most relevant evidence was included in the REA, MPI also contacted 21 experts and practitioners in the fields of migration and development to solicit recommendations of key literature and research in this area. As a result of these consultations, the team added 7 articles to the evidence base. The team also reviewed the reference lists of particularly strong studies for additional evidence, employing a "snowball technique." As a result, 21 articles were added to the database.

In total, 509 studies were initially identified for review based on their abstracts. The full text of each article was then evaluated against the inclusion and exclusion criteria (see Section 3.2 below) to narrow down the evidence base to a total of 172 studies.

3.2 INCLUSION AND EXCLUSION CRITERIA

In order to ensure the included studies were relevant to the research questions, the MPI research team applied a list of inclusion and exclusion criteria to the identified studies during the abstract and full text review stages. Several considerations informed the development of these criteria. First, each included study should examine the impact of livelihoods opportunities or interventions on international migration, with migration as one of the dependent variables. Second, the research question for each included study should be specifically focused on policies and interventions in countries of origin and transit that potentially affect people's decision to migrate. For instance, studies highlighting policies and practices in countries of arrival that render them particularly attractive destinations, such as favourable visa or labour market policies, were excluded. (See Table 3 for a full list of the inclusion and exclusion criteria.)

Inclusion Criteria	Studies must focus on the impact of conditions in a low- or low middle-income country, as defined by the World Bank. By way of exception, studies on Jordan were included due to the country's key role in the Syrian Refugee Response. Studies covering livelihood interventions in Mexico were also included because they comprised a large proportion of the evidence base on interventions specifically.
	Studies on livelihood opportunities • Must focus on determinants in the country of origin, transit, or first asylum. • Migration must be a dependent variable (e.g. impact of unemployment on decision to migrate, and not impact of migration on wealth or employment)
	Studies on specific livelihood interventions • Interventions must have the goal of improving the capacity of the target group to earn a sustainable living. • Livelihoods project must have been located in an origin, transit, or first asylum country considered low- or low middle-income (except Mexico). • Must specifically consider the migration effects of the intervention.
	Written in English
	Must relate to international migration
Exclusion Criteria	Primarily theoretical or conceptual in nature
	Student paper, dissertation, research brief, book, book chapter, conference paper, unpublished work, working paper from organisation not identified in Table 1 (the list of sources above).
	Deals only with return migration from high-income countries to low- or low middle-income countries
	Studies published before 2002
	Primarily historical studies that use primary data before 1990

Table 3. Inclusion and exclusion criteria.

MPI also set several geographic criteria in order to ensure the REA results reflected DFID priority countries. Because the number of studies identified was initially quite large, the geographic limitations also ensured the number of studies reviewed was feasible in the timeframe of the REA. In consultation with DFID, MPI thus chose to include only studies that consider conditions or interventions in low-income or low middle-income economies, as defined by the World Bank.[7] Researchers made two exceptions: (1) studies from Jordan were

[7] The categories "low-income" and "low middle-income" are defined by World Bank classifications. See The World Bank, "World Bank Country and Lending Groups," accessed March 20, 2017, https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups.

included given the country's salience in the Syrian Refugee Response region; and (2) studies specifically examining livelihood interventions in Mexico were included as much of the research on the migration effects of livelihood interventions has been conducted in Mexico. MPI researchers also excluded student papers, dissertations, research briefs, books and book chapters, conference papers, papers published by universities, unpublished papers, and working papers from institutions not explicitly included as sources for the REA (see Table 3). This ensured that the research team did not review studies "in progress," which may later be modified for publication.

3.3 QUALITY ASSESSMENT

Next, each included study was assessed for quality and assigned a score using a standardised assessment framework. MPI used separate frameworks to assess the quality of the 140 primary and 32 secondary studies that comprise the evidence base.[8] The quality of primary studies was rated across six categories: conceptual framing, transparency, appropriateness, validity, reliability, and cogency. Secondary studies were assessed on their conceptual framework, coverage, quality assessment (of the works referenced in the study), and cogency.

MPI tested the assessment framework during the scoping phase of the project to confirm that the framework produced similar scores between researchers, and to test its applicability to a variety of types of studies. Based on the scoping phase, the team adjusted the validity and reliability criteria to ensure they were also appropriate to qualitative studies. Double weight was also given to the validity and cogency scores of the primary studies. Table 4 below shows the scoring system used for primary and secondary studies, and an example of the full assessment framework is available in Appendix C.

Primary Studies	**Score**	**Secondary Studies**	**Score**
Conceptual Framing	0-3	Conceptual Framework	0-1
Transparency	0-3	Coverage	0-3
Appropriateness	0-3	Quality Assessment	0-3
Validity	0-3 (2x)	Cogency	0-3
Reliability	0-3		
Cogency	0-3 (2x)		
TOTAL	*0-24*	*TOTAL*	*0-10*

Table 4. Quality Assessment Framework for Individual Primary and Secondary Studies. Note: For primary studies, Validity and Cogency categories are weighted

To calibrate scoring procedures, 15 studies were reviewed by more than one reviewer during the full quality assessment phase, and any differences in scores were discussed among the team members. Some of the initial scores given to these studies differed by 3 to 4 points, particularly in the categories of validity and cogency, which are double-weighted

[8] Complete quality assessment frameworks for both primary and secondary studies can be found in Appendix C.

and prone to subjectivity about the quality of a given study's design and clarity of the conclusions. Based on the discussions, reviewers were able to modify the final scores, which all fell within a margin of 3 points. The MPI team ultimately attributed the average of the two reviewers' totals as the final score for these double-reviewed studies.

3.4 ANALYSIS OF EVIDENCE

MPI used a narrative synthesis approach to analyse the evidence identified by the REA. A narrative approach was used for two reasons. First, this allowed the REA to capture the results of both qualitative and quantitative studies. Approximately half of the high-quality studies identified by the REA were qualitative or mixed methods studies, meaning that a strict meta-analysis would have excluded important findings from the evidence base.

Second, substantial differences in research design and type of data analysed made conducting a robust meta-analysis difficult and potentially of limited value. In particular, there is insufficient uniformity across the studies regarding the level of analysis used (individual, household, or macro-level), the type of data analysed (survey or administrative/outcome data), the timescale of the data (cross-sectional or longitudinal), and perhaps most importantly, the dependent variable measured (migration aspirations or actual migration). Only four of the quantitative studies reviewed presented baseline migration probabilities, rendering it difficult to fully understand and compare the size of effects across studies. Because of this variation in methods and data sources, MPI determined that a narrative approach that considers the context/approach of the research is more appropriate to fully convey the main findings than a statistical meta-analysis.

For the 36 studies that relied on regression analysis to analyse household or individual-level data, researchers ensured the statistical significance and effect sizes informed the weight given to the findings of each study in the analysis. Further details of the quantitative study results, including statistical significance, model type, and sample and effect sizes, are presented in Appendix D.

The narrative synthesis was conducted using a thematic coding approach. Each of the 172 included studies was logged in an Excel database and coded according to research method and design, type of report, quality scoring, and geographic context. Notes on the studies' major findings and position within the livelihoods framework were also included to enable deeper analysis of the evidence base after assessing the quality of individual studies. The sustainable livelihoods framework provided a guideline to inform the initial coding of the studies; however, the team also approached the coding in an inductive manner, and adjusted and added codes throughout the review of the evidence to reflect emerging relevant themes that were not originally included in the livelihoods framework.

After the evidence was coded, MPI researchers reviewed the evidence database to identify the most recurrent themes and concepts across studies within each element of the sustainable livelihoods framework. Within these themes, MPI considered the strength of the evidence available (whether high or moderate quality and the limitations of the methodological approaches used), the geographic coverage of the evidence (whether

research had been conducted in enough contexts to be generalizable), and the consistency of the findings. The analysis included an examination of any trends regarding the variables within studies that may have influenced the observed effects. The team considered the characteristics of individual studies (including context and methods), and how these may have influenced the study outcomes or contributed to overall trends.

Ultimately, after consulting with DFID, MPI determined that the volume of high and moderate quality evidence permitted the team to exclude the low-quality studies from the analysis. Studies were divided based on their quality scores: high quality (19-24, 68 studies), moderate quality (11-18, 53 studies), and low quality (0-10, 51 studies). In this report, in text references to studies include their assessed quality level (H – High Quality, M – Moderate Quality, L – Low Quality) alongside the author name and year of publication.[9]

[9] The citation format is thus [author name in text] ([quality], [year]) or ([author name], [quality], [year]).

4.0 THE OVERALL STRENGTH OF THE BODY OF EVIDENCE: KEY OBSERVATIONS

Of the 121 studies of high- or moderate-quality included in the REA, a total of 113 provided evidence on the first research question (the impact of livelihood opportunities on migration) and 17 related to the second question (the impact of livelihood interventions on migration).[10] 51 studies focusing on livelihood opportunities and one study focusing on livelihood interventions were excluded, as they did not meet the quality threshold. This section examines the overall quality, size, context, and consistency of the evidence base in regard to each research question. Specific determinations regarding the strength of the evidence in relation to various dimensions of the livelihoods framework and livelihood interventions will be discussed in detail in Sections 5 and 6. Table 5, below, illustrates the criteria used to make a determination regarding the strength of the evidence for each theme.

Evaluation	Quality	Size	Context	Consistency
Very Strong	High	Large (16+ studies)	Global	Consistent
Strong	High	Medium (9-15 studies)	Global	Consistent
Medium	Moderate/High	Medium (9-15 studies)	Specific/Global	Inconsistent
Limited	Low/Moderate/High	Small (2-8 studies)	Specific	Inconsistent
No evidence	Few to no studies exist (0-1)			

Table 5. Framework on assessing the overall strength of a body of evidence.

While the REA identified a large number of studies, particularly on the topic of livelihood opportunities, the evidence base as a whole suffers from several key shortcomings. First, the studies identified by the REA vary enormously in the types of data they use, how they define and measure key concepts (including migration), and the analytical approaches they choose. This is likely due in part to the limited nature of the data available on migration patterns. Relatively little longitudinal data are available regarding migration patterns from origin countries; many quantitative studies thus rely on cross-sectional survey data for their analysis. Some of these surveys rely on retrospective data gathered from participants to track migration behaviour over time; other data sets are limited to documenting migration aspirations. Such data present several challenges. First, there is an inherent risk of recall bias in retrospective surveys: participants may not remember earlier behaviour or circumstances with full accuracy. And the value of surveys that focus only on migration aspirations can be limited, as such data provide no information about whether individuals eventually act on these aspirations. Finally, cross-sectional data have limited capacity to demonstrate causal

[10] 13 of the reviewed studies are counted twice, as they provide evidence to answer both the first and second research questions.

connections between variables, such as particular livelihood conditions and migration patterns.

Where longitudinal data do exist, research has proliferated. Seven studies have explored migration patterns in Chitwan Valley, Nepal, where the Chitwan Valley Family Survey has tracked household economic conditions and outcomes and migration behaviours since the late 1990s. Similarly, the largest body of evidence on livelihood interventions exists on the Progresa cash transfer programme in Mexico, which was designed to be evaluated as a randomised control trial with data gathered on participants' behaviours for several years after they began receiving cash transfers.

The lack of detailed, high-quality data on migration patterns also manifests itself in the relatively limited detail most studies provide on *how* migration occurs. Most studies measure migration through a simple categorical variable indicating whether or not a household member or individual reports having migrated over the course of the study. Many, but not all studies do distinguish between internal and international migration, but few distinguish between specific international destinations. Even fewer studies provide details regarding how long migration lasted (temporary versus permanent) or the type of migration undertaken (irregular versus regular, or labour versus asylum or family-based). Where studies do report these details, they are included in the analysis.

Research on livelihoods and forced migration patterns is also relatively underdeveloped. Of the 113 livelihood opportunities studies considered by the REA, only 22 examined situations involving forced migration and less than half of these studies were of high quality. Looking specifically at livelihood interventions, just 5 of 17 dealt with forced migration, of which three were high quality. Given the growing interest of humanitarian and development actors in building livelihoods capacity in forced migration contexts, the lack of high-quality evidence on forced migration is a critical evidence gap.

Finally, most studies examined by the REA were conducted in countries or communities with relatively high levels of migration. While high migration contexts may be attractive to researchers because they allow for a large research sample, they also bring the risk of selection bias. Without a comparison group in a context where migration is less prevalent, important explanatory factors may go unidentified while the impact of other factors is over or underestimated. At present, the research base does not sufficiently recognise this potential for bias and the effect it may have on the reliability and validity of findings. Research into contexts with less migration, as well as cross-context research, would strengthen the evidence base. Additional qualitative studies in these contexts would be particularly valuable for understanding better what factors encourage or discourage the creation of migration aspirations.

The following subsections will examine in greater detail the size, quality, and context of the evidence on livelihood opportunities and livelihood interventions specifically.

4.1 LIVELIHOOD OPPORTUNITIES

Of the 164 studies that provide evidence on the impact of livelihood opportunities, roughly an equal proportion were rated as high, moderate and low quality (see Table 6). Those that were rated low quality were excluded from the analysis, leaving a total of 113 studies on livelihood opportunities in the REA.

Quality Score	**Frequency**	**Percentage**
High Quality (19-24)	63	38.4
Moderate Quality (11-18)	50	30.5
Low Quality (1-10)	51	31.1
Total	**164**	**100.0**

Table 6. Distribution of livelihood opportunity studies by quality score.

The body of evidence on livelihood opportunities covers low- and low middle-income countries across all geographic contexts examined in the REA: East Asia and the Pacific (EAP), Europe and Central Asia (ECA), Latin America and the Caribbean (LAC), Middle East and North Africa (MENA), South Asia (SA), and Sub-Saharan Africa (SSA) (see Figure 3).[11] The largest number of studies was global (i.e. covered multiple regions). The size of the evidence base was smallest in the ECA, LAC, and MENA regions, which each had fewer than five studies rated as high or moderate quality. The MENA region had no high quality studies.

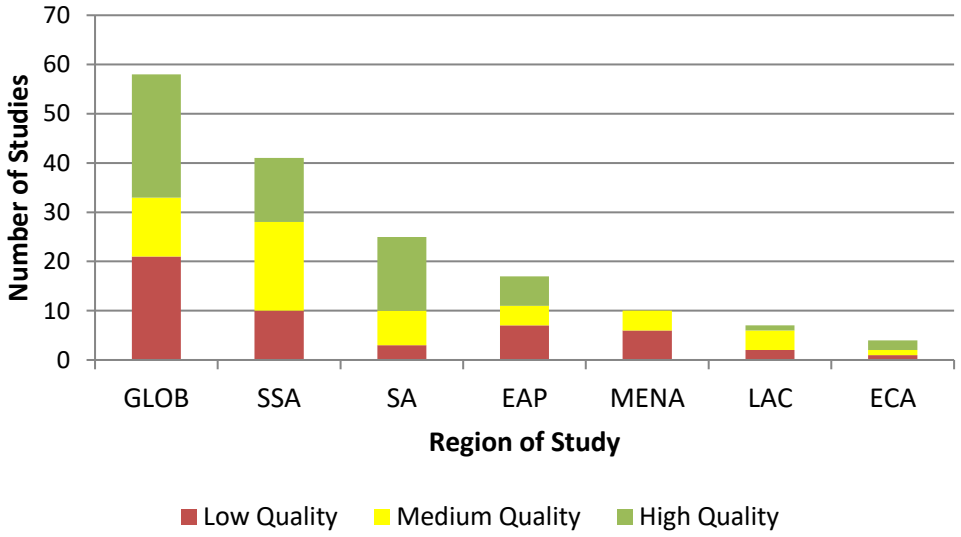

Figure 3. Distribution of livelihood opportunity studies according to geographic context and quality.
Note: Regions are defined according to World Bank classifications.

The high- and moderate-quality body of evidence on livelihood opportunities is heavily skewed towards studies on voluntary migration; just 22 studies explore impact of livelihood opportunities in a forced migration context (see Table 7). The majority of these studies included populations from countries experiencing war in the past two decades, namely Afghanistan, Iraq, Somalia and Syria.

Migration Type	Frequency	Percentage
Voluntary Migration	91	80.5
Forced Migration	22	19.5
Total	**113**	**100.0**

Table 7. Distribution of livelihood opportunity studies according to quality.

4.2 LIVELIHOOD INTERVENTIONS

A total of 17 studies considered in the REA examined the effects of livelihood interventions on migration decisions. One study did not meet the quality threshold and was excluded from the analysis. While the number of studies identified is very small compared to the number dealing with livelihood opportunities, the overall quality of the evidence can be categorised as high: more than half of the intervention studies were rated as high quality (10 studies, see Table 8). The livelihood interventions evidence base also includes the only experimental and quasi-experimental studies identified by the REA.

Quality Level	Frequency	Percentage
High Quality (19-24)	10	55.6
Moderate quality (11-18)	7	38.9
Low Quality (1-10)	1	5.6
Total	**18**	**100.0**

Table 8. Distribution of livelihood intervention studies according to quality.

The evidence evaluated includes studies from four geographic contexts, with the exception of ECA and MENA. The greatest number of studies provide evidence from the LAC and SSA contexts. There is a relative paucity of evidence conducted in other contexts, as the EAP region includes three and SA region includes only two studies. The lack of evidence on the MENA region (see Figure 4) is a critical gap given the region's central role in many of the major forced migration crises today.

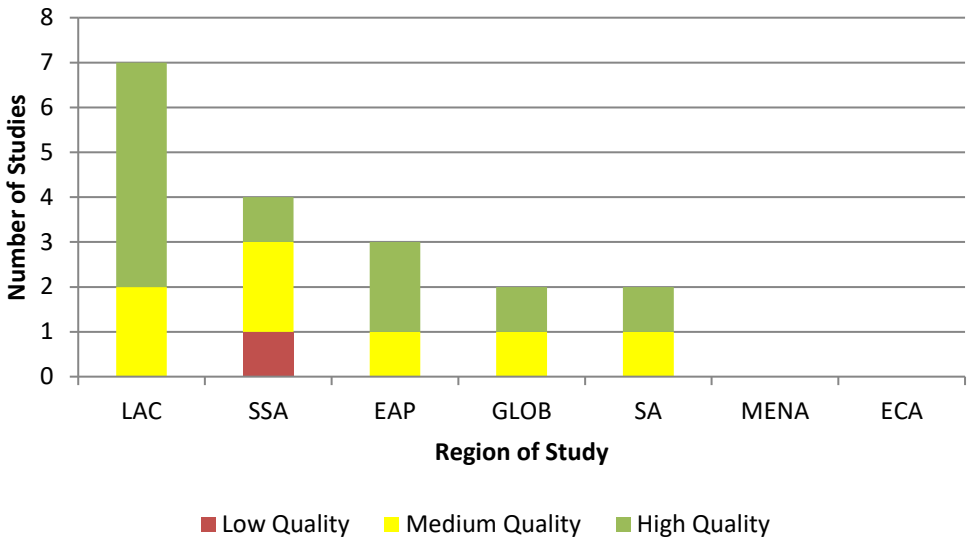

Figure 4. Distribution of livelihood intervention studies according to geographic context and quality. Note: Categories in the chart align with World Bank categories described on page 16.

The 17 studies rated as high or moderate quality cover three types of intervention: increasing financial resources, increasing human capital, and improving productive capacity through business development. While 11 studies provided evidence on financial interventions, just three studies dealt with human capital interventions and two with business development. No studies were found examining job matching or cash-for-work programmes.

Given the emphasis currently placed in the humanitarian and development communities on supporting livelihoods in forced migration contexts, the small number of studies on interventions in forced migration contexts is another major gap in the evidence base (see Table 9). Moreover, the evidence base contains no studies on the impact of cash transfers in refugee settings, a major focus of current relief efforts.

Migration Type	**Frequency**	**Percentage**
Voluntary Migration	12	70.6
Forced Migration	5	29.4
Total	**17**	**100.0**

Table 9. Distribution of livelihood intervention studies according to type of migration.

5.0 THE EVIDENCE ON THE EFFECT OF THE AVAILABILITY OF LIVELIHOOD OPPORTUNITIES ON INTERNATIONAL MIGRATION

This section will examine the evidence on the first research question:

> What effect does the availability of ***sustainable livelihood opportunities*** have on international migration from low-income or low middle-income counties, both within the region and to higher-income regions? Do these effects differ according to the type of work available (e.g. formal or informal, self- versus wage-employment, high- or low-quality jobs), and socio-demographic factors?

113 high or moderate quality studies provided evidence on livelihood opportunities. Per the livelihoods framework, this section will first consider the evidence on the effects of livelihoods assets, followed by the vulnerability context, and finally, structures and processes.

5.1 LIVELIHOODS ASSETS

The livelihoods framework defines livelihoods assets as a combination of financial capital, human capital, physical capital, natural capital, and social capital. The REA identified a large body of evidence (42 studies) that examines how each of these five dimensions affects migration aspirations and actions. The evidence is of mixed quality, with 21 high-quality and 21 moderate-quality studies. While the studies on livelihood assets cover all six world regions, there is more evidence on migration from South Asia and Sub-Saharan Africa than from the other regions (see Figure 5). The lack of evidence on the MENA region is particularly concerning, as the region is currently a major source of forced migration.

This section will present the evidence on each type of livelihood asset—financial capital, social capital, human capital, physical capital, and natural capital—in turn. Particular attention will be paid to the size, quality, context, and consistency of the evidence in each area.

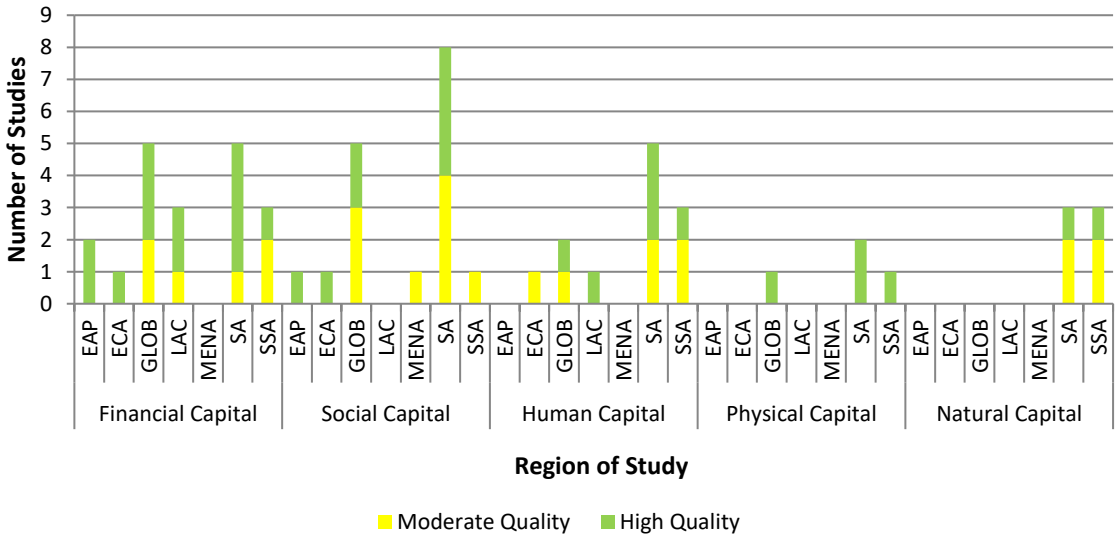

Figure 5. Distribution of livelihood assets studies, by type of capital, geographic context and quality. Note: Regional are defined according to World Bank classifications.

Key Findings on Livelihood Assets

- **Financial capital** is a key facilitator of migration; only those who can cover the costs of migration are ultimately able to migrate. Households with greater financial resources—including income or access to remittances or loans—are more likely to engage in migration. Moreover, higher income may enable migration to destinations that are farther away, and thus costlier.
- **Social networks** in origin and destination communities play an important role in contributing to migration aspirations and decisions and facilitating actual migration. Migration decisions often appear to occur at the household level and to be driven by information obtained from the local community or networks abroad. Family and friends are also an important source of information and financing to support migration journeys.
- Secondary schooling appears to increase the likelihood of migrating, though the effects of **education** may diminish among those with post-secondary or tertiary education. More education may give rise to greater migration aspirations or facilitate migration by enabling individuals to access more opportunities abroad—though the literature provides no definitive evidence on either point. By contrast, actually being enrolled in school may decrease migration, at least in the short term.
- The evidence on **physical capital**, such as roads and infrastructure, and **natural capital**, such as land ownership, is limited. More research is required to identify the effects of both types of assets on migration patterns.

5.1.1 FINANCIAL CAPITAL

A large number of relatively high-quality studies[12] across five of six geographic regions provides evidence on the role of financial capital in migration aspirations, decisions, and actions. The literature identified by the REA suggests that financial capital—defined as savings and liquid assets as well as income, remittances, or other regular financial transfers—may affect migration intentions and decisions in two ways. First, households may use migration and the resulting remittances as a strategy to increase their financial capital and invest in new livelihood strategies. The desire to accumulate financial capital thus gives rise to migration aspirations. Second, financial capital can act to facilitate or constrain actual migration among those who already aspire to migrate.

[12] The evidence base is comprised of 13 high -quality and 6 moderate quality studies. No evidence specifically on migration from the MENA region was identified, although several multi-region studies conducted in destination or transit countries included migrants from the MENA region.

The remainder of the section will consider the strength of the evidence base on each of these two points in turn: (1) financial capital as a motivator of migration aspirations, and (2) financial capital as a facilitator of migration actions. The effect of broader economic conditions, including the availability of employment or the ability to earn a sufficient income, is dealt with in Section 5.2 on the effect of the vulnerability context.

5.1.1.1 FINANCIAL CAPITAL AS MOTIVATING FACTOR

The evidence base identified on financial capital as a motivator of migration was small, but consistent: two studies conducted in Ethiopia and Bangladesh found evidence of migration playing this role. A study by Frouws (M, 2014) in Ethiopia[13] found that obtaining capital to start or expand a business was the most common reason cited by survey respondents for aspiring to migrate. The results also suggested that migration may be part of a household economic strategy, as respondents often indicated that their parents or spouse had contributed to their aspiration to migrate. Looking at actual migration, Mendola (H, 2008) found that households in Bangladesh[14] with sufficient resources to do so relied on international migration as a source of capital to invest in new, higher yield crops.

5.1.1.2 FINANCIAL CAPITAL AS FACILITATING FACTOR

Second, financial capital can act to facilitate or constrain actual migration among those who already aspire to migrate. Migration can be an expensive undertaking, and the extent to which households and individuals have access to income, savings, or external financing such as remittances to cover the costs of migration is likely to determine whether they are able to migrate. A large, relatively high quality evidence base[15] drawn from five of six world regions consistently links an increase in financial capital with an increase in actual migration. The studies identified used four variables to examine the relationship between financial capital and migration patterns: (1) per capita GDP, generally used by macro-level studies; (2) household income; (3) receipt of interventions designed to increase household financial resources; and (4) self-reported barriers to acting on migration aspirations.

At a macro level, the correlation between increased income, up to a certain threshold, and more migration, often called the "migration hump," has been well documented. A small number of studies analysed by the REA identified a link between an increase in per capita GDP and higher national emigration rates. Berthélemy et al (H, 2009) and Adams and Page (H, 2003) both find statistically significant evidence of an inverted U-shaped relationship between per capita GDP in origin countries and stocks of migrants in OECD countries: migration increases up to a certain level of income and then decreases. Artuc et al (H, 2015) found evidence of the same relationship among high-skilled emigrants. A secondary review by Clemens (M, 2014) provides further evidence to support the migration hump.

[13] The study consisted of a cross sectional survey of 148 potential migrants in Ethiopia. Additional samples were also taken with current migrants abroad and returned migrants in Ethiopia.
[14] The study analysed survey data from 3,404 farming households in Bangladesh.
[15] The evidence is comprised of 13 high quality and six moderate quality studies.

While these macro studies point to a correlation between income and migration rates, they are not able to shed light on the dynamics that drive this relationship at the individual and household levels nor how the effects may vary in different local contexts. Studies using household and individual level data confirm these findings but provide a somewhat more nuanced picture.

A small number of high quality studies using household level income found relatively consistent evidence that higher levels of income are correlated with more migration (Czaika, H, 2011; Mendola, H, 2008; Yang and Choi, H, 2007; Shrestha, H, 2017; Henry et al, H, 2004).[16] The authors uniformly interpreted their results as evidence that more income allowed households to overcome budget constraints that would otherwise prevent migration. One study by Hoti (H, 2009)[17] in Kosovo, however, found higher household income was correlated with *lower* individual probabilities of migrating, though the effect was small and much smaller than that observed for other explanatory variables such as education and gender.[18] The geographic context may explain some of the difference in findings, as the study is the only one on financial capital identified by the REA in Europe. Moreover, the study contained a mix of rural and urban households (44 percent are from urban areas), while with the exception of Czaika, other studies identified on household income considered communities with primarily agricultural livelihoods.

A third subset of evidence examined the effect of a change in household financial resources brought about by livelihood interventions (cash transfers or microfinance loans) provided without conditions. (Financial interventions are discussed in further detail in Section 6.1.) A small number of mixed quality studies found relatively consistent evidence that an increase in financial resources due to an intervention facilitated more actual migration in Mexico, Cambodia, and Guatemala (Angelucci, H, 2004; Angelucci, H, 2013; Bylander, M, 2014; and Stoll, M, 2014), though the evidence on one unconditional cash transfer programme in Indonesia was inconclusive (Mahendra, H, 2014). Similar to the studies on household income, the authors suggest that financial interventions facilitate more migration by providing households with the financial capacity to undertake journeys that otherwise would have been too expensive.

Further evidence of this relationship comes from a small number of moderate quality studies that examined the reasons why potential migrants had not followed through on their migration aspirations. The studies consistently found that costs are a major factor in migration decisions, and more specifically, high costs could deter aspiring migrants from acting on their intentions (Bellamy, M, 2017; Jayasuriya et al, H, 2016; Frouws, M, 2014; Altai

[16] These studies each analyse data from large sample (500 or more respondent) surveys using regression analysis to test the statistical significance of the findings. The studies draw on data from India, Bangladesh, Nepal, the Philippines, and Burkina Faso. Three studies (Yang and Choi, H, 2007; Shrestha, H, 2017; and Henry et al, H, 2004) conducted in primarily agricultural regions of the Philippines, Nepal, and Burkina Faso used annual rainfall as a proxy for household income.

[17] The study examined temporary labour migration from Kosovo to Germany and Switzerland using cross-sectional labour force survey data. The survey sample size was 8,552 individuals.

[18] The study found that an increase in household income by 100 percent decreased the likelihood of an individual having migrated for both men (4 percentage points) and women (0.06 percentage points).

Consulting, M, 2016).[19] Moreover, Frouws (M, 2014) found that 89 percent of aspiring migrants surveyed in Ethiopia preferred irregular migration channels because they believed them to be cheaper than legal labour recruitment options (most often to Gulf states). It is important to note, however, that none of the studies tested the statistical significance of their observations, and it is thus not possible to determine the relative influence of costs versus other factors in driving migration aspirations.

A small number of high-quality studies also found evidence that financial capital may dictate how far someone is able to migrate. Destinations farther away are likely to entail more expensive journeys, and destinations that require crossing an international border carry additional costs for documentation (e.g. visa fees) or facilitation (e.g. recruiter or smuggling fees). Czaika (H, 2011)[20] found that an increase in average annual household consumption increased the probability of the household having an international migrant or a long-distance migrant within India, but decreased the probability of short-distance migration within India.[21] Similarly, Mendola (H, 2008)[22] found that households that report a higher perception of poverty are less likely to have a migrant abroad and more likely to have a household member who has migrated within Bangladesh. In both studies, the authors theorise that poorer households may have budget constraints that impede international migration, which is costlier though it offers higher returns.

Shrestha (H, 2017) and Henry et al (H, 2004) similarly concluded that an increase in income tied to rainfall facilitated longer distance journeys. Shrestha (H, 2017)[23] found that an increase in household income by US$100 (using rainfall as a proxy) was significantly correlated with an increased rate of migration from villages in Nepal to India.[24] There was no effect on migration to farther international destinations, however; the authors attribute this to the higher cost of international destinations farther away, which cannot be covered by the relatively marginal increases in income brought by additional rainfall. In Burkina Faso, Henry et al (H, 2004)[25] determined that in villages experiencing a "production surplus" brought about by the increase in harvest due to greater rainfall the probability of individuals

[19] Bellamy (M, 2017) analysed a small survey (56 respondents) of Syrian refugees in Istanbul. Jayasuriya et al (H, 2016) relied on data from a 20,632 household survey in Sri Lanka covering multiple geographic regions and ethnic groups. Frouws (M, 2014) examined survey data from 148 potential migrants and 143 returnees in Ethiopia, as well as 100 current Ethiopian migrants in Yemen. Altai Consulting (M, 2016) used data from a survey of 1,200 Somalis under 30 years old across Mogadishu, Baidoa, and Kismayo.

[20] The authors drew on cross-sectional data on 125,000 households from the country-wide Indian National Sample Survey (NSS). The study used household consumption, corrected for the receipt of remittances, as a measure of financial resources.

[21] An increase in consumption of approximately USD 2250 increased the probability of the household having an international migrant by 1 percent and a long-distance migrant within India by 6 percent. The probability of short-distance migration within India declined by 10 percent.

[22] The authors used data from a cross-sectional survey of over 5,000 households across eight villages in rural Bangladesh.

[23] The authors used panel data from 452 village wards in Nepal.

[24] The migration rate increased by 2.5 percentage points.

[25] The study used a database from a nationally representative retrospective survey on migration involving 8,644 individuals as well as community-level data based on a retrospective community survey conducted of 600 settlements in early 2002.

undertaking international migration was higher.[26] Conversely, individuals in areas that experienced less than average rainfall in the preceding three years were more likely to migrate internally.[27] Henry et al (H, 2004) interpret these findings as evidence that international migration was used by more well-off households to get ahead, while internal migration was an adaptation by poorer households to increased livelihood constraints.

5.1.2 SOCIAL CAPITAL

A large number of studies of mixed quality[28] consistently identified a strong role for social capital,[29] either in the origin country or abroad, in contributing to migration aspirations or facilitating actual migration. In several studies, social capital was more strongly correlated with migration probabilities than any other livelihood factor. However, as the findings were context specific[30] and of mixed quality, the evidence base must be considered medium strength.

The studies identify two primary ways social capital may influence migration. First, *social connections with former migrants* may give rise to migration aspirations as existing migrants communicate their successes and experiences to aspiring migrants, or as families and friends seek to reunify with those already abroad. Existing migrants may also serve as facilitators by providing financing (through remittances) or information on migration opportunities to those who have decided to migrate.

At the macro-level, the connection between bilateral migration flows and existing diaspora populations in a destination country has been well established. Two global studies identified by the REA provided evidence that migration flows between a particular origin and destination are correlated with having an existing diaspora population in the destination country (Artuc et al, H, 2015 and Hoeffler, M, 2013).

Household- and individual-level data provided a more nuanced picture of how previous migrants influence migration aspirations and actions. Docquier et al (H, 2014), Leeves (H, 2009), and Munteanu (M, 2007) find evidence that having family or a household member abroad is correlated with increased migration aspirations.[31] Docquier et al (H, 2014) further observed that the effect of social networks abroad was larger for the college educated.

[26] In villages that had experienced annual rainfall at 95 percent or more of the average level for the last three years, males are roughly 44 percent more likely to move abroad than to not migrate, while females are 33 percent less likely to move abroad than to not migrate.
[27] In these villages, the likelihood of migrating to another rural area within Burkina Faso increased for men, though there was no statistically significant effect on international migration.
[28] The evidence base includes nine high-quality and eight moderate-quality studies.
[29] Social capital is defined here as social networks and connections.
[30] The literature included eight studies from South Asia, five global or multi-region, one each from Europe and Central Asia, East Asia Pacific, MENA, and Sub-Saharan Africa.
[31] Docquier et al (H, 2014) and Leeves (H,2009) draw on large sample surveys in countries of origin. Munteanu (M, 2007) uses evidence from a small survey (52 respondents) of asylum seekers in Romania who aspire to migrate onward to other destinations. The effects observed by Docquier et al (H, 2014) and Leeves (H, 2009) were large and statistically significant.

Connections with previous migrants also appear to increase the likelihood of *actually* migrating. Several studies found that living in an area with high migration rates increased the probability that an individual would migrate (Bohra and Massey, H, 2009; Massey et al, H, 2010; Mendola, H, 2008; Hoti, H, 2009; and Heering et al, M, 2004).[32] Neighbourhood migration rates and previous household migration were the strongest predictors of actual migration in the Massey et al (H, 2010) study, which also examined the effect of environmental and economic conditions on actual migration. Similarly, Hoti (H, 2009) found regional migration rates to be one of the strongest predictors of migration from Kosovo.

A few studies observed different effects based on gender and for internal versus international migration. Heering et al (M, 2004) found that having family abroad slightly decreased the probability of migrating abroad for men in Morocco, but it increased it among women. In Bangladesh, Mendola (H, 2008) reported that having a higher share of migrants in the village raised the odds of engaging in both internal and international migration. But the effects of having a family member abroad before the study was conducted were stronger for internal than international migration.

Qualitative and descriptive studies shed more light on *how* networks abroad influence migration aspirations and actual migration. A longitudinal survey by Jayasuriya et al (H, 2016) in Sri Lanka found that individuals with family abroad were more likely to follow through on their migration aspirations by actually migrating over the course of the study than those without family abroad. This suggests that social connections with previous migrants may not just give rise to migration aspirations but help facilitate actual migration. A cross-sectional survey by Koser and Kuschminder's (H, 2016) of refugees in Turkey and two qualitative studies in Afghanistan (Echavez et al, M, 2014) and Sri Lanka (Attanapola, M, 2013) similarly found evidence that networks of friends and family abroad acted as an important source of information for planning the journey and, in some cases, provided financing for the costs of the trip.

Several studies, however, suggest that social networks in the *origin community* also play an important role in giving rise to migration aspirations or facilitating movement. The findings of these studies suggest that migration decisions are often made by families rather than individuals and local perceptions about the utility of migration as a strategy for achieving livelihood or other goals often inform these decisions.

The results of several studies in Afghanistan (Echavez et al, M, 2014; and Loschmann et al, M, 2014) and Sri Lanka (Attanapola, M, 2013) provide evidence that family are often involved in making migration decisions and providing financing to carry them out. A regression of household survey data in Afghanistan by Loschmann and Siegel (M, 2013) provided further evidence that local social networks can play a critical role in facilitating migration. The

[32] Bohra and Massey (H, 2009) and Massey et al (H, 2010) used longitudinal data from the Chitwan Valley Family Survey in Nepal. Mendola (H, 2008), Hoti (H, 2009), and Heering et al (M, 2004) drew on data from large sample surveys in Bangladesh, Kosovo, and Morocco. The results for all five studies were statistically significant.

authors found that having *low* social capital within the local community[33] greatly decreased the probability of expressing an aspiration to migrate, and the effect was larger than that observed for income, physical and human capital, or access to services.

The views of local community members regarding the value of migration relative to local livelihood options may give rise to migration aspirations, according to the results of one study. A qualitative study of youth in Mali (Jonsson, M, 2008) reported that older community members generally held local livelihoods in low regard and viewed migration as the only way to achieve economic success, contributing to migration aspirations among youth.

5.1.3 HUMAN CAPITAL

The studies identified by the REA primarily deal with human capital in terms of educational attainment and enrolment.[34] A medium-sized body of evidence of mixed quality was consistent in finding that educational attainment, up to a certain level, contributes to more people aspiring to move and higher probabilities of actually migrating. Regression analyses of household- and individual-level data from both longitudinal and cross-sectional data sets analysed by Baizan and Gonzalez-Ferrer (M, 2016), Bohra and Massey (H, 2009), Docquier and Peri (H, 2014), Henry et al (H, 2004), Loschmann and Siegel (M, 2013), Mendola (H, 2008), and Williams (H, 2009) provide evidence that higher levels of educational attainment were significantly correlated with greater migration probabilities from Afghanistan, Armenia, Bangladesh, Burkina Faso, Senegal, and Nepal.[35] Bellak et al (M, 2014) observed the opposite effect of education, however, on short-term migration from Armenia to Russia.[36]

Several studies observed that the effects of educational attainment may diminish for those with the highest levels of education (post-secondary or tertiary levels), an effect that has been termed the "education hump." Cross-sectional surveys by Collyer et al (H, 2013) in Armenia, Georgia and Morocco;[37] Hagen-Zanker et al (M, 2014) in Nepal and Pakistan;[38] and Altai Consulting (M, 2016)[39] in Somalia found that aspiring migrants were most likely to have a mid-level of education (primary or secondary school), relative to those with no education or individuals who had attended post-secondary or tertiary education.

There is also evidence that the effects of educational attainment may be larger for internal than international migration. Bohra and Massey (H, 2009) in Nepal and Mendola (H, 2008) in Bangladesh found that educational attainment increased the likelihood of both internal and international migration but the effects were larger for internal migration. Henry et al (H,

[33] Social capital was measured based on self-reported membership in community organisations, receipt of help from social networks, and self-assessed quality of social networks.
[34] No studies were found on health or other aspects of human capital.
[35] Docquier and Peri examined data from a global survey of migration intentions and histories.
[36] Only the highest level of education, tertiary education, showed a negative correlation with the likelihood of undertaking short term labour migration, and was only significant at the 10 percent level. This may be evidence of the education hump, or the fact that highly-educated people either have work in Armenia, or choose different destinations.
[37] Data were collected through 12,000 interviews.
[38] The study drew on in-depth interviews with 52 non-migrant and internally displaced persons.
[39] The survey drew a sample of 1,200 respondents under age 30 in three Somali cities.

2004) observed a strong correlation between greater educational attainment and the probability of moving internally to an urban area, but finds no significant increase in probability of international migration.[40]

The exact mechanism through which educational attainment influences migration aspirations, decisions, and actions is, however, still unclear. Several authors note that those with more education may be more able to act on their migration aspirations either because they qualify for more regular migration opportunities or because they possess knowledge or financial capital that facilitates actual migration. Docquier and Peri (H, 2014) found no difference between the less educated and college educated in terms of migration aspirations but observed that post-secondary education increases the likelihood of actually migrating.[41] Others suggest that the more educated may be more likely to aspire to migrate because of greater potential returns on their education abroad, though the marginal difference in returns may decrease at the highest levels of education. More research is needed, however, to understand the dynamics underlying the effect of educational attainment.

Some research suggests a difference between the effects of educational attainment and enrolment, though the evidence on enrolment is still limited. Two high-quality studies from Nepal and Mexico observed that enrolment in school decreases actual migration probabilities. Williams (H, 2009)[42] found that current enrolment is significantly correlated with decreased migration for both males and females, though the effects of enrolment were stronger on females. Angelucci (H, 2004) also found evidence that a conditional cash transfer programme in Mexico that required school attendance lowered migration rates in villages that participated.[43] Both authors suggest that the presence of schools in origin areas may retain people as long as they can pursue education locally. However, once they complete the available schooling, their higher educational attainment may increase their migration aspirations.

5.1.4 PHYSICAL CAPITAL

Physical capital, defined as the availability of infrastructure (e.g. roads, shelter, sanitation, and accessible communication networks), is a key part of building sustainable livelihoods. Poor infrastructure can be detrimental to human capital (e.g. worse education and health outcomes) or prevent producers from accessing markets (e.g. due to lack of information or transportation). The evidence base on the influence of physical capital is, however, limited. The REA identified a small but high quality body of evidence on physical capital. The findings are not consistent regarding the effect of physical capital on migration, and the evidence is context specific: two studies of the four studies were conducted in Chitwan Valley in Nepal.

[40] The effect on migration to rural areas within Burkina Faso were also not statistically significant.
[41] The authors conducted a regression of global data from the World Gallup surveys of actual and aspiring migrants. One out of five college-educated potential migrants became an actual migrant (within the decade examined) while only one out of twenty potential migrants among the non-college-educated finally migrated.
[42] The study relied on data from the Chitwan Valley Family Survey in Nepal. The effects were statistically significant. Women were more than twice as likely to migrate if not enrolled in school, as opposed to males, who were one and a half times more likely to leave.
[43] The full findings of this study will be discussed in Section 6 on livelihood interventions.

One study provided evidence on the effects of infrastructure on migration aspirations. Dustmann and Okatenko (H, 2013)[44] found better access to infrastructure was correlated with a decrease in migration aspirations and has a larger effect than household wealth.

Research on the effects of infrastructure on actual migration produced inconsistent results. While Massey et al (H, 2009)[45] found that greater access to community infrastructure in adulthood decreased the probability of individual migration from Chitwan Valley, Nepal, Bohra and Massey (H, 2009) use a different measure of access to infrastructure in Chitwan Valley and found an opposite effect. Bohra and Massey observed that shorter average distances to key infrastructure (such as clinics, bus stops, schools, and markets) are significantly correlated with a higher likelihood of migrating internationally but are not a statistically significant predictor of internal migration. Differences in how Bohra and Massey (H, 2009) and Massey et al (H, 2009) measure migration may account for some of the difference in the studies' findings. Massey et al's migration indicator does not distinguish between the distance of migration, while Bohra and Massey's findings suggest that infrastructure may have different effects on internal and international migration. In Ethiopia, Tegegne and Penker's (H, 2016)[46] reported findings similar to Bohra and Massey. Households located in a livelihood zone closer to commercial farming areas (and thus with better access to transportation and markets) were three times more likely to migrate than those who were not.[47] When the data was disaggregated by short- versus long-term migration, the authors found that living close to a commercial farming area increased the odds of short-term migration but had no statistically significant effect on long-term migration.

Just one study explored how the effects of infrastructure may differ over an individual's lifecycle. Massey et al (H, 2009) observed that while greater access to key services reduces probability of migration as an adult, better access to services as a child is shown to improve educational achievement, which is correlated with a statistically significant increase in migration probabilities later in life.

5.1.5 NATURAL CAPITAL

A small body of evidence of moderate quality[48] from South Asia and Sub-Saharan Africa have also considered how natural capital, in particular land and livestock, affects livelihoods and in turn migration. Land is an important asset for building sustainable livelihoods, particularly for rural households. Its value extends beyond its direct use in productive activities as it can

[44] The authors use analysis of individual survey data from Latin America, Asia and Africa to measure contentment with local amenities (including transportation, schools, and water quality). The effects were statistically significant.
[45] Massey et al use the Chitwan Valley Family Study as well as a life history survey conducted with 1,583 households across 151 neighbourhoods. The authors measure access to infrastructure by the number of key services such as health care, education, and transportation within a five minute walk. The study does not consider whether migration was internal or international.
[46] The authors used data from a retrospective survey of 553 households in Ethiopia.
[47] The finding was statistically significant.
[48] The evidence base consists of two high-quality and four moderate-quality studies.

be put down as collateral for loans, which provide households with access to financial capital.

A small body of evidence of mixed quality[49] consistently found that land ownership increases migration probabilities. This conclusion is in line with the studies examined on financial capital, which suggested that households with greater financial capital are more likely to have a member who has migrated.

Bhandari (M, 2004) in Nepal,[50] Baizan and Gonzalez-Ferrer (M, 2016) in Senegal, and Litchfield et al (M, 2015)[51] and Mendola (H, 2008) in Bangladesh found a statistically significant correlation between land ownership and the probability of migrating. Tegegne and Penker (H, 2016), however, found no statistically significant effect of owning land on migration probabilities in Ethiopia.

There is evidence that the effects of land ownership vary when demographic factors or type of migration are considered. Mendola finds that land ownership specifically increases the probability of international rather than internal migration, though Litchfield finds no evidence of differing migration probabilities based on destination. Baizan and Gonzalez-Ferrer's (M, 2016) findings are only statistically significant when considering labour migration. Litchfield's findings do differ by gender, with land increasing men's migration probabilities but decreasing those of women.

Like land, livestock is also a critical asset in building livelihoods. In rural communities, livestock is not just used as productive capital; it can also be a form of savings in a way not fundamentally different from cash, bank deposits, or other assets. Just two studies identified by the REA considered the relationship between livestock ownership and migration. While both found livestock ownership decreased migration probabilities, the authors offered different explanations for this finding. Konseiga (M, 2005) looked at seasonal migration from Burkina Faso to Côte d'Ivoire and found that pastoralist households with unsecured livestock did not migrate, though those without livestock did. The author hypothesises that owners of unsecured livestock were unable to migrate because of risks associated with leaving the herd unattended. Mendola (H, 2008), however, views this inverse relationship as evidence that migration and livestock ownership are substitute livelihood investments.

5.2 VULNERABILITY CONTEXT

Livelihoods can be deeply affected by the context in which they are made. In particular, trends in how the national and local economy is structured, political trends, changes in the environment and availability of natural resources, and technological trends can all have an impact on the sustainability of individual and household livelihood strategies. Rapid changes,

[49] The evidence on land ownership consists of three moderate- and two high-quality studies.
[50] Data are from a survey of 1,465 farming households in Chitwan Valley.
[51] The survey drew a sample of 1200 households.

or shocks, like natural disasters, conflict, or epidemics can also affect the feasibility of maintaining a livelihood locally.

The REA identified 48 studies of mixed quality that examined factors that affect the vulnerability context, as defined by the livelihoods framework, and by extension migration aspirations and actions. No studies were found on Latin American and the Caribbean, and very few studies provided evidence on the Middle East and North Africa. By contrast, Sub-Saharan Africa and South Asia, particularly Nepal, were well covered (see Figure 6). The research focused on the effects of economic trends, natural trends and shocks, and conflict. This section will address the primary findings on each of these three factors in turn.

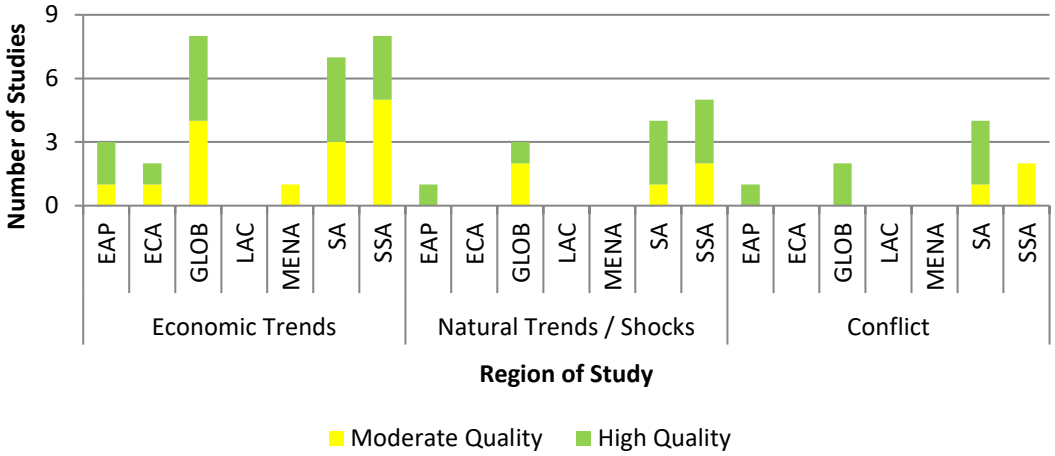

Figure 6. Distribution of vulnerability context studies, by type of vulnerability, geographic context, and quality.
Note: Regions are defined according to World Bank criteria.

Key Findings on Vulnerability Context

- A **lack of opportunities to work** or earn a sufficient income may give rise to migration aspirations, particularly among refugees in first asylum countries. More research is needed, however, to determine how a perceived lack of opportunity interacts with other motivating factors, and the extent to which aspirations turn into actual migration.
- Depending on the context, having **employment** may facilitate actual migration or deter migration aspirations. In areas where the financial costs of migration are prohibitive, the income, social networks, or skills generated by employment may help aspiring migrants to overcome barriers to migration. Where the benefits of migrating are lower, or the risks higher, having employment may discourage migration.
- Communities have a strong preference not to move following **rapid onset natural shocks**, such as tornadoes or earthquakes. When support for rebuilding infrastructure or diversifying livelihoods exists, these events are unlikely to lead to more migration.
- Migration can occur as the result of **long-term environmental change**, though the circumstances under which this occurs are highly context specific. In situations where agricultural productivity is affected, households with sufficient assets may adopt migration as an alternative or supplemental livelihood strategy. Such moves are more likely to be internal than international, though further research is needed.
- More research is needed into how livelihood factors and **conflict** interact to affect migration patterns. The limited evidence identified by the REA suggests that financial and other assets continue to play an important role in facilitating or constraining migration during conflict. Without sufficient resources, the opportunity to move in search of safety remains out of reach.

5.2.1 ECONOMIC TRENDS

A large body[52] of evidence across five regions, excluding Latin America, considered how economic conditions, measured by perceptions of economic opportunity and employment status, in the origin country affect migration decisions and aspirations. These studies primarily examine the potential impact of employment from four specific angles: (1) how self-reported perceptions of economic opportunities in the country of origin or transit affect migration aspirations; (2) whether employment status in the country of origin increases or decreases the probability of migration; (3) how the quality and type of employment affect actual migration, and (4) how career aspirations affect migration decisions. Most of the studies examined provide evidence on the first point (eleven studies), and the findings of these studies are consistent: suggesting that a lack of perceived opportunities to achieve one's livelihood objectives may create migration aspirations. The body of evidence on the effect of employment status, quality and type of work, and career aspirations is limited, however.

[52] The evidence base consists of 29 studies across every region except Latin America.

5.2.1.1 PERCEIVED LACK OF ECONOMIC OPPORTUNITY AS A MOTIVATOR OF MIGRATION ASPIRATIONS

A medium-sized body of evidence of moderate quality from four regions consistently found that aspiring migrants cited a perceived lack of opportunities to work or earn a sustainable wage as a primary reason for their desire to migrate, particularly among refugees in first-asylum countries. It is important to note, however, that most of the studies support their analysis with descriptive statistics, and do not test the significance of their findings through regression analysis. Moreover, the studies rely almost exclusively on cross-sectional surveys or qualitative data collected at a single point in time. It is thus not always possible to determine whether aspirations actually translate into migration in these circumstances, or how the experiences and motivations of those interviewed post-migration differ from those who chose not to migrate. The studies are also dominated by research on refugees in first asylum countries, who may evaluate migration aspirations differently than those still in their countries of origin;[53] moreover all the studies were conducted in high-migration contexts, potentially limiting their applicability in other contexts.

Among refugees in first asylum countries, survey studies identified by the REA consistently reported a perceived lack of economic opportunities as a primary reason refugees desired to migrate onwards. Studies by Koser and Kuschminder (H, 2016),[54] Moret et al (H, 2006),[55] the Danish Refugee Council (M, 2016),[56] and Altai Consulting (M, 2016)[57] found that a majority of refugee respondents cited a lack of work opportunities as the top or one of the top reasons they aspired to move on. Surveys and in-depth interviews by Samuel Hall (M, 2014),[58] Munteanu (M, 2007),[59] and Bellamy et al (M, 2017)[60] found that the majority of

[53] The studies of first asylum countries were themselves dominated by research on Eritrean, Somali, and Syrian refugee populations, further limiting their generalisability.
[54] Koser and Kuschminder (H, 2016) found that nearly two-thirds of respondents in a survey of 1,056 refugees and migrants in Turkey and Greece who indicated a desire to move on cited lack of employment options as the main reason. It is important to note, however, that the study excluded Syrians as the Turkish government requires special permissions to interview this group. Interviews were instead conducted with Afghans, Iraqis, Iranians, and Pakistanis.
[55] The authors conducted a survey of 814 Somali refugees in Djibouti, Egypt, Ethiopia, Kenya, the Netherlands, South Africa, Switzerland and Yemen. Nearly half of respondents (43 percent) reported the lack of employment or educational opportunities as a reason for wanting to leave their country of first asylum, with little difference between male (41 percent) and female (45 percent) respondents.
[56] The study draws on a survey of 1,148 Eritrean, Somali, and Congolese refugees in Ethiopia found that 69 percent of those who aspired to go to Europe were motivated primarily by a desire to find better work opportunities, as legal work opportunities for refugees are highly restricted in Ethiopia. Focus group respondents indicated that for the jobs that are available in host countries, primarily through NGOs and international agencies, the wage paid is insufficient to maintain a decent standard of living or deter further migration, suggesting that the lack of a sustainable wage may have been a motivation as well as the lack of employment prospects.
[57] The survey of 1,200 youth under 30 years old across three major Somali cities found that both non-migrant (46 percent) and internally displaced and returnee (41.6 percent) respondents to the survey who aspired to migrate abroad cited finding a better job was a motivating factor—higher than the share who cited either the conflict with Al-Shabab as a motivation (32 percent of non-migrants and 27 percent of internally displaced).
[58] The study was based on a survey of 779 Eritrean refugees in Ethiopia and similarly concluded that lack of self-reliance among refugees contributed to onward movement aspirations for young males.
[59] The authors found that half of the 42 interviewees reported a lack of self-reliance opportunities as a reason for aspiring to migrate.
[60] The authors conducted in-depth interviews with Syrian refugees in Istanbul, Turkey.

respondents reported that the lack of opportunities for self-sufficiency more broadly was a major reason they hoped to leave their first asylum country.

How perceptions regarding the availability of work or opportunities for self-sufficiency interact with other motivators is still somewhat unclear. Several studies allowed respondents to choose more than one reason why they desired to migrate, and without further contextual detail regarding these responses, it is impossible to determine how these factors may interact to influence migration aspirations. Just one study tested the statistical significance of the survey results (Koser and Kuschminder, H, 2016), but the authors were not able to detect a measurable difference between the effect of a perceived lack of employment opportunities and security concerns on migration aspirations.[61]

Just one study provided evidence on motivations for undertaking actual onward migration among refugees. Crawley et al (M, 2016)[62] found that a third (34 percent) of respondents interviewed in Greece indicated that they had decided to leave Turkey because they "were running out of money, found it impossible to secure employment or were working long hours for very little pay."

While most of the research identified by the REA was conducted in first-asylum countries, a small number of studies conducted in Ethiopia, Indonesia, and Afghanistan were also consistent in finding that a perceived of lack of economic opportunities in the country of origin contributed to migration aspirations (Frouws, M, 2014; Yen et al, M, 2015; Echavez et al, M, 2014; Attanapola, M, 2013).[63] All four studies are based on interviews with both aspiring and current or returned migrants, and thus provide evidence on motivations for both aspirations and actual migration. The findings of these studies suggest that perceptions regarding opportunities to earn a sufficient living may be just as important as perceptions regarding the availability of work. In Ethiopia, Frouws (M, 2014) reported respondents in the study's focus group discussions elaborated that they see migration as "the only viable option to escape poverty." Interviews by Echavez et al (M, 2014) in Afghanistan suggested that a "desire for economic stability and opportunity" because of the families' poor economic situation was a common motivator of migration among unaccompanied migrant youth. Attanapola (M, 2013) found that the "need to ease the economic burdens of their family" was a primary motivation for moving abroad among current and returned migrants from Sri Lanka.

[61] The variable for lack of employment opportunities was not statistically significant in the model.
[62] The authors conducted interviews with 500 refugees and migrants along the Central and Eastern Mediterranean routes to Europe.
[63] Frouws' (M, 2014) surveyed of 391 potential, current, and returned Ethiopian migrants. Focus group discussions were conducted with a smaller subset of the sample. Yen et al (M, 2015) conducted 55 in-depth interviews in Ponorogo and Surabaya, Indonesia with current or returned migrants (most frequent destinations included Malaysia, Taiwan, and Saudi Arabia) and non-migrants. Echavez et al (M, 2014) conducted in-depth interviews with former and non-migrant children and their families in Afghanistan. Attanapola (M, 2013) also drew on in-depth interviews with 14 current and returned migrants from Sri Lanka. Participants in the study had at least a secondary education, and relied on Sri Lanka's National Labour Migration Policy to migrate.

5.2.1.2 EFFECT OF EMPLOYMENT STATUS IN THE ORIGIN OR TRANSIT COUNTRY

A small number of studies spread across four global regions, as well as one multi-regional study, examined the effect of being employed (or not) prior to migrating on two primary factors: (1) probability of actually migrating, and (2) the likelihood of migrating regularly (or irregularly).

The evidence on the effect of having employment on the probability of actually migrating is small, inconsistent, and likely to be highly context specific. Jayasuriya et al (H, 2016), Tegegne and Penker (H, 2016), and Heering (M, 2014) found evidence that having employment before migrating is correlated with a greater probability of actually migrating. Jayasuriya et al (H, 2016)[64] found that among respondents expressing interest in migrating during the initial survey, those who followed through on their migration aspirations were more likely to have been employed in the country of origin than those who did not migrate. Tegegne and Penker (H, 2016)[65] found a statistically significant correlation between a greater number of economic activities undertaken by the household and a higher likelihood of the household having a migrant. Heering (M, 2004) observed that the effects of employment differed based on gender. Employment is a strong and significant predictor of actually migrating among women in Morocco, though no statistically significant effect could be discerned for men.[66]

A study by Bellak et al (M, 2014)[67] of short-term labour migration of Armenian men, however, found conflicting results. The study observed that men who were unemployed (rather than employed) were significantly more likely to migrate to Russia. Bellak interpreted these findings as evidence that for those who did have employment, the opportunity costs of giving up their jobs were greater than the potential gains of working in Russia. Moreover, a "de facto visa-free migration regime" between Armenia and Russia has lowered the costs of migration, making it accessible to those with lower financial resources.

Just one study considered the effects of actually having employment for refugees in a first-asylum country, possibly because first-asylum countries often restrict refugees' rights to work, and legal employment is thus not an option. Koser and Kuschminder (H, 2016) observed that, for refugees who have already fled their country of origin to Turkey, having employment in the transit country is correlated with a statistically significant decrease in onward migration aspirations. This finding suggests that employment may have a different effect on migration in first asylum versus origin countries, though Koser and Kuschminder only provide evidence on migration aspirations and not whether these are realised as actual

[64] The authors conducted a longitudinal survey among aspiring and non-migrants in Sri Lanka. Among those who followed through on their migration aspirations, 75 percent were employed, while just 46 percent of those who did not migrate were employed.
[65] The authors conducted interviews with 553 randomly selected households in four rural sites in northwest Ethiopia. Economic activities included both farm and non-farm activities.
[66] The author notes that these findings are likely to be context specific, as women in Morocco who work outside the home are likely to have much less culturally conservative views and may also be more likely to migrate for this reason.
[67] The study was based on panel data of 5,479 individuals.

migration. More research is needed to determine whether this effect is observed in other contexts and how it affects actual migration.

Taken together, the findings of these five studies suggest that employment may affect migration aspirations and actions in several ways depending on the context. Where the costs of migration are prohibitive, assets generated by employment (e.g. income, social networks, skills) could facilitate aspiring migrants to follow through on their intentions. Where the benefits of migrating are lower (e.g. Armenians migrating to Russia) or the risks higher (e.g. for refugees in Turkey), having employment may discourage migration aspirations or actions. Further research is needed, however, to test these findings in more contexts.

The REA also identified a limited body of evidence on the effect of employment at origin on the type of migration individuals undertake (regular or irregular). Two moderate quality studies in two regions found that migrants who had been employed in the origin country were more likely to have migrated legally, though more research is needed to confirm this finding. Abdel-Karim (M, 2016)[68] observed that Egyptian and Moroccan migrants in Italy and Spain who had been employed in the origin country had a lower probability of having migrated illegally. Having more than a secondary education and a sufficient financial situation in the country of origin were also significant predictors of migrating legally. It is possible that those who were employed were higher skilled and thus better able to access regular migration channels, though the study does not test this. The study may also be vulnerable to selection bias, as the sample was drawn entirely from migrants who had already successfully migrated. Loschmann et al (M, 2014) also found a statistically significant correlation, but small, between unemployment and likelihood of undertaking *irregular* migration from Afghanistan. The vast majority of those who moved irregularly went to Iran or Pakistan, while those who migrated farther were more likely to have done so legally.

5.2.1.3 QUALITY AND TYPE OF WORK IN THE ORIGIN OR TRANSIT COUNTRY

A limited body of evidence examined the effect of salaried employment on migration aspirations and actual migration, with inconsistent results. Collyer et al's (H, 2013) cross-sectional survey of potential migrants from Armenia, Georgia, and Morocco found that those with salaried work were less likely to report migration aspirations. Bohra and Massey 's (H, 2009) study of Chitwan Valley, Nepal observed that having a salaried job increases the probability of undertaking internal migration (both within Chitwan Valley and to other destinations in Nepal), and decreases international migration. The effects were significant and of moderate size.

Just one study, rated high quality, considered connections between informal employment (defined as employment that does not produce taxable income) and migration. In Tajikistan, Abdulloev et al's (H, 2011) analysis of income and migration data of 4,860 households found evidence that households may use international migration as a substitute livelihood strategy to informal work in the country of origin. The study found a statistically significant

[68] The study used survey data from 1,100 respondents. The effect observed was statistically significant.

correlation between having a member of the household abroad and obtaining less income from informal sources in the country of origin. Additional research in other contexts is needed, however, to confirm this finding.

5.2.1.4 LACK OF OPPORTUNITIES FOR CAREER ADVANCEMENT AS MOTIVATOR OF ASPIRATIONS AND ACTUAL MIGRATION AMONG THE HIGH SKILLED

A medium body of high-quality evidence found that among the highly skilled who have employment, a desire for higher salary is a primary reason for aspiring to move abroad. Studies by Brown and Connell (H, 2004),[69] Sheikh et al (H, 2013),[70] Chikanda (M, 2006),[71] and Blacklock et al (H, 2014)[72] found a strong connection between salary motivations and aspirations or decisions to migrate among health care professionals in lower-income countries. Migration was generally to higher-income destinations, particularly the United States, the United Kingdom, Canada, Australia, and New Zealand.

Outside of the medical field, there is also evidence that better remuneration for work motivates migration, though the quality of the evidence is lower than for studies on healthcare professionals. Among high-and medium-skilled migrants from Southeast Asia, China, and India, Khoo et al (H, 2007) found that employment-related reasons (including salary, career development, and international experience) are statistically significant reasons for actually migrating to Australia, though the analysis did not allow for determining the size of the effect. Reynolds (M, 2006) found evidence of a similar motivation among professional women from Nigeria and Ghana in the United States. The ethnographic study found that a desire for greater financial and professional independence was a major motivation for migration.

A much smaller, but high quality, body of evidence consistently finds that the highly skilled may see migration as part of a career improvement or quality of life strategy that is sometimes made independently from the social and or economic situation in the country of origin. The evidence is limited to migration from South Asia, however. Interviews with 26 Indian scientists conducted by Cohen et al (H, 2012) in the United States and the United Kingdom suggested that, while some of the respondents would like to pursue their careers in India, all perceive migration abroad as a necessary step to engage with networks of the most renowned scientists in their field, many of whom are also Indian, and working at

[69] The authors explored the importance of income considerations to the decisions of doctors and nurses who chose to migrate from Fiji, Samoa and Tonga to Australia and New Zealand. The sample included 251 medical professionals. A regression analysis demonstrated a statistically significant relationship at the 1 percent level between income motivations and the likelihood of being a current or returned migrant from any of the three countries. The presence of one or more parents living abroad was the only other factor found to be significant.
[70] This survey of 323 medical students in Karachi found that the most common reason students intended to migrate (mentioned by 76 percent of respondents) was higher salary.
[71] The authors conducted a survey of 231 health professionals in Zimbabwe. The results showed that "better remuneration" was the most common motivation for aspiring to migrate internationally, cited by 55 percent of respondents.
[72] The authors conducted a secondary review of six studies. The review concluded that that the number one reason for both aspirations to migrate abroad and actual international migration among health workers and trainees in Sub-Saharan Africa was the desire to earn a higher salary to support the basic needs of their families.

foreign universities. Cohen et al label this phenomenon as “career migration” or migration as part of a social process. In a study using emigration data for top students from New Zealand, Tonga and Papua New Guinea Gibson and McKenzie (H, 2011) found that having studied a foreign language or taken multiple science courses in school have the strongest correlation with future migration, more so than individual wealth or changes in GDP growth.[73] One study found that career considerations may not always translate into movement through labour migration channels, however. Jirovsky et al's (H, 2015) interviews with ten medical professionals who had migrated to Austria found that while quality of work and career considerations may create migration aspirations (the first migration threshold), this does not necessarily mean movement occurs through labour channels. Most interviewees instead reported moving to Austria through other migration channels, particularly family unification in part because these channels were easier and because their partners chose Austria as a destination.

5.2.3 NATURAL TRENDS AND SHOCKS

Longer-term trends such as environmental deterioration and changing precipitation and drought patterns have the potential to affect a households' calculation of the relative risk of and returns to particular livelihoods and cause a shift in household strategies. Studies identified by the REA point to consistent evidence that negative environmental trends and shocks may increase internal short-distance migration but findings on the effect upon international migration are inconclusive. Thirteen studies consider the impact of negative environmental trends and events on livelihoods and, as a result, migration. The evidence base covering these trends is composed of five high-quality and six moderate-quality studies (five on Sub-Saharan Africa, four on South Asia, one on Latin America and the Caribbean, and one on East Asia Pacific).

5.2.3.1 NATURAL SHOCKS

The REA identified a small but consistent evidence base examining the impact of natural shocks (e.g. flooding, storms, earthquakes) on migration aspirations and actions. Two high-quality studies and one moderate-quality study found evidence that unanticipated rapid-onset environmental shocks, while sometimes devastating to communities, rarely precipitate mass out-migration, either internally or internationally. The literature suggests that communities have strong preferences not to move in the face of rapid-onset disasters when opportunities for diversifying livelihoods or rebuilding original infrastructure exist. However, as all three studies occurred in South Asia and East Asia Pacific (Bangladesh, Nepal, and Thailand), the findings must be considered context specific and thus of limited strength.

[73] The effect is statistically significant. It is important to note, however, that the study defines an emigrant rather broadly as anyone who has ever studied or worked abroad after secondary school graduation.

Paul (H, 2005) and Rahman et al (H, 2015) examined migration decisions in the aftermath of natural disasters in Bangladesh.[74] Paul (H, 2005) found that of all households surveyed in the aftermath of a tornado, none reported out-migration internally or internationally, with most respondents attributing the choice to stay to the fact that they received sufficient and timely emergency assistance. Similarly, Rahman et al's (H, 2015) household survey, conducted two months after a flood in August 2012 along southeastern Kutubdia Island in Bangladesh, found that only five percent of local residents intended to or had already migrated due to the flood, owing both to infrastructural destruction of their homes and economic forces pushing them from their place of origin. Much like Paul's study (H, 2005), respondents expressed reluctance to migrate on the basis of environmental pressures, taking advantage of opportunities to stay in their home communities when possible. In the case of those who chose to migrate, no international migration was recorded. The authors suggest that their findings demonstrate that residents affected by natural disasters will often only migrate as a last resort, and when their social networks enable this possibility, rather than as their preferred option.

A case study of climate change and environmental hazards in Nepal and Thailand by Bardsley and Hugo (M, 2010) came to similar conclusions. The author emphasised that migration is less frequently the result of a specific natural shock, and more often the result of long-term environmental stress or an increased frequency of shock events. Bardsley theorises that communities have "thresholds" of post-disaster coping strategies, and only after these are exhausted does migration become a vital component of an effective adaptation response.

5.2.3.2 ENVIRONMENTAL TRENDS

A medium body of evidence of mixed quality[75] considered the effect of long-term environmental trends on migration aspirations and actual migration across three regions. The studies examined the effects of trends including decreased rainfall, increased incidence of drought, deforestation, and temperature change. Overall, the studies were consistent in finding that longer-term environmental changes, particularly those associated with declining agricultural productivity, can prompt migration, though the conditions under which this occurs are highly context specific. Moreover, a limited body of evidence suggests that these moves are most likely to be internal rather than international.

Authors of six of these studies (Henry et al, H, 2004; Yang and Choi, H, 2007; Bylander, M, 2014; Konseiga M, 2005; Gautier et al, M, 2016; and Bardsley and Hugo, M, 2010), conducted in West Africa, South Asia, and East Asia Pacific, find evidence that households turn to migration as a strategy to mitigate economic risk due to variability in natural conditions and frequent environmental shocks. Henry et al (H, 2004) finds that decreases in rainfall in Burkina Faso best predict short-term local migration by men, which the authors

[74] Both studies were based on descriptive statistics from cross-sectional survey data. The sample size for Paul (H, 2005) was 291. For Rahman et al (H, 2015) the sample size was 109.
[75] The evidence consists of six high-quality and five moderate quality studies.

interpret as temporary labour migration, while Yang and Choi (H, 2007) find that income from remittances in the Philippines increases in response to declines in income due to lower rainfall. Ethnographic research by Bylander (M, 2014) in Cambodia adds nuance to this picture: informants in the study suggest that labour migration by a household member is seen as a smart investment to protect against natural variability in agricultural livelihoods. A systematic review of environmental change and migration in West Africa (Gauiter et al, M, 2016) and a case study in Nepal and Thailand (Bardsley and Hugo, M, 2010) reach a similar conclusion regarding the use of migration as an environmental risk management strategy in some contexts.

When households do migrate, they appear to demonstrate a preference for internal moves. Four high-quality studies and one medium-quality study examined the differing effect environmental trends may have on short-distance or internal migration versus international migration (Henry et al, H, 2004; Massey et al, H, 2010; Beine and Parsons, H, 2015; Gray and Wise, H, 2016: and Marchiori et al, M, 2012). The studies rely on evidence from South Asia (Nepal) and Sub-Saharan Africa (Kenya, Uganda, Nigeria, Burkina Faso and Senegal), as well as from a global data set. The studies were consistent in finding that, considered broadly, negative environmental trends are more likely to produce migration that is internal or short-distance migration rather than international. Migration across international borders is more likely to be pursued when barriers to international movement are low (as in the case of strong social networks across borders or long-held patterns of international seasonal movements by agriculturalist societies).

The two macro-level analyses of global migration (Beine and Parsons, H, 2015; and Marchiori et al, M, 2012) point to a greater effect on internal than international migration. Beine and Parsons (M, 2016), using global bilateral stock data, find no evidence that changes in climate conditions are correlated with international migration, though they do find evidence of internal migration as measured by accelerated urbanization. And an analysis by Marchiori et al (M, 2012) of international migration data in Sub-Saharan African countries found a statistically significant effect of weather anomalies on internal rural-to-urban movements, though Marchiori anticipates that the effects of such urbanization movements may in turn affect international migration patterns in the long-term.

More nuanced findings come from the regression analyses by Henry et al (H, 2004), Massey et al (H, 2010), and Gray and Wise (H, 2016)[76] who observe that negative environmental trends (such as precipitation, temperature, or greater distance to gather firewood) have a greater influence on internal rather than international migration. Massey et al (H, 2010), for example, find that declines in perceived agricultural productivity, the amount of green space locally, and the availability of firewood were significantly correlated with an increase in the likelihood of moving within Chitwan Valley, Nepal. While a perceived decrease in agricultural productivity also increased the probability of longer-distance moves (including international migration), the size of the effect was half as large as for local moves. Gray and Wise (H,

[76] The study relies on data from 9,812 households in Kenya, Uganda, Nigeria, Burkina Faso, and Senegal.

2016) detect that environmental variables have a statistically significant impact on internal migration across four of five study countries (Kenya, Uganda, Nigeria, and Burkina Faso, but not Senegal) but the effect on international migration is only significant in Nigeria and Burkina Faso. The direction of the effects, however, is not consistent across countries, leading the authors to conclude that contextual differences have a large influence on how environmental trends affect migration. For example, the sample in Senegal is mostly urban, and thus has greater household access to alternative livelihoods strategies that are less affected by environmental variability. This suggests that the effects of an environmental trend or shock could ultimately depend on the extent to which households are dependent on the environment for economic livelihoods, and whether there are other options nearby.

As Gray and Wise highlight, the studies identified by the REA suggest that relationships between environmental trends and migration (whether internal or international) are rarely, if ever, simple or linear. Rather, strategies are multifaceted and invariably interlocked with other determinants of socioeconomic opportunities and barriers to movement. The research identifies several intermediary factors including educational attainment, social networks, gender, and proximity to an international border. Henry et al (H, 2004), for example, only find that rainfall predicts migration once they disaggregate the effects based on destination and duration of migration as well as gender. They conclude that "migration behaviour is not very responsive to community-level variables...but rather depends on individual characteristics such as educational level, the type of activity or the ethnic group to which the individual belongs." Similarly, Massey et al (H, 2010) find that the effect of environmental factors on migration probabilities is smaller than that of social networks or human capital. Higher levels of education, however, increase the probability of long-distance migration, and households with a member who has previously migrated were particularly likely to move longer distances.

Massey et al (H, 2010), Gray and Mueller (H, 2012), and Henry et al (H, 2004) all find that the effects of changing environmental conditions differ for men and women. Massey et al (H, 2010) finds that women are less likely to move long distances than are men. Gray and Mueller (H, 2012) find that drought increases men's labour migration but decreases female marriage migration in rural Ethiopia. The authors suggest that the additional financial constraints associated with drought force households to find additional income and minimise existing expenses; men may migrate to generate remittances while reducing total consumption in the origin household while women delay marriages to limit bride-wealth expenses associated with marriage, such as the giving of dowry. Similarly, Henry et al (H, 2004) finds that drought decreases the probability of permanent migration for women, which the authors posit primarily occurs for marriage.

5.3.1 SHOCKS DUE TO CONFLICT

Violent conflict, political oppression, and persecution also have the potential to disrupt livelihoods. While there is a wide body of literature on conflict inducted migration, the research questions and inclusion criteria narrowed the studies considered by the REA to

those that considered the influence of conflict from a livelihoods perspective. The REA identified a small body of evidence of mixed quality[77] that examined the connections between livelihoods, conflict, and migration decisions. The studies generally explore very different aspects of forced migration and thus reported very inconsistent findings.

The lack of robust evidence on conflict and livelihoods may be due in part to the difficulty of conducting individual- and household-level research in conflict settings. Of the studies included in the REA, two used global data and three were conducted with respondents in transit or destination countries, where data is easier and safer to collect.[78]

This approach has drawbacks, however, as the sample is restricted to those who successfully reached a particular destination country, likely biasing the results. In addition, many studies conducted in transit countries have focused on onward migration rather than original migration motivations, and are discussed elsewhere in the REA. The studies that did rely on individual and household level data represent just four countries and thus likely do not capture the full range of effects conflict may have.

Considered broadly, the evidence does suggest that migration aspirations, decisions, and actions in conflict situations are often intertwined with livelihood considerations and are rarely straightforward or linear. Broad conditions of conflict or oppression in a country can limit local livelihood possibilities by restricting access to production inputs or markets or destroying needed physical capital. While conflict can of course give rise to migration aspirations in and of itself, economic distress caused by conflict can also cause individuals to aspire to leave (Zimmerman, M, 2011; Echavez, M, 2014; and Altai Consulting, M, 2016).

Interviews by Zimmerman (M, 2011) with Somali refugees in the United Kingdom and by Echavez (M, 2014) and Altai Consulting (M, 2016) in Afghanistan suggest that households first attempt to adapt their livelihood strategies to local conditions in order to remain in place. Eventually, however, a precipitating event such as the destruction of property (e.g. a house) or the loss of a family member (e.g. older brother or father) or oppressive political conditions (e.g. local Taliban instructing youth to stop attending school) would disrupt this strategy and cause household members to act on latent migration aspirations.

Livelihood conditions also shape how migration from conflict zones occurs and who is able to move. Two regression analyses (Czaika and de Haas, H, 2011; Shrestha, H, 2017; and Williams, M, 2013) found a correlation between income, conflict conditions, and migration. Czaika and de Haas' (H, 2011)[79] found that higher country scores on the Political Terrorism Index were correlated with higher bilateral migration flows; however the results were only significant once the authors controlled for income, suggesting that financial resources affect how responsive individual and household migration is to conflict conditions. Similarly,

[77] The evidence consists of three high-quality, four moderate-quality studies.
[78] Approximately half of the studies (four) took place in South Asia, while one used global macro-level data. Two studies took place in Somalia.
[79] The authors conducted a macro-level study using bilateral migration data.

Shrestha (H, 2017)[80] found that an increase in conflict intensity of one death per thousand people increases village migration rate by .8 percentage points, but the results are only significant in urban areas. Like Czaika and de Haas, the authors suggest that income constraints mean that rural households are less able to move in response to conflict.

Evidence from qualitative studies (by Zimmerman, M, 2011; Echavez, M, 2014; and Altai Consulting, M, 2016) bear this out. All three authors find that financial constraints affect families' migration decisions and actions in conflict settings. The studies report that households will often decide to send one family member abroad because high costs mean migration for the family as a whole is not an option. Even once this decision is taken, gathering sufficient resources to actually migrate can take months or years (Zimmerman, M, 2011), depending on local conditions. A longitudinal survey by Jayasuirya et al (H, 2016) in Sri Lanka similarly found that individuals who aspired to migrate for asylum reasons most often reported that costs and anti-smuggling operations by the government were the factors that had prevented them from actually moving.

One study provided evidence on the influence of other local livelihoods factors on migration in conflict settings. Williams (M, 2013) found that more frequent gun battles within a neighbourhood in Chitwan Valley, Nepal were correlated with increased migration from that neighbourhood. The effects were significantly reduced, however, in neighbourhoods with a greater number of community resources and organisations such as health clinics and farmers' cooperatives. The authors suggest that these institutions may increase local resilience and thus the effectiveness of household adaptation strategies.

5.3 STRUCTURES AND PROCESSES: GENDER

While there is a broad literature on gender and migration, the results of the REA show that the specific relationship between gender, *livelihood opportunities*, and migration has not been systematically explored in research to date. The large number of studies that explored the role of gender in migration were of mixed quality, and covered all world regions with the exception of Latin America (see Figure 7). The studies examined a wide variety of migration dynamics, however, making it difficult to identify consistent findings across studies.

[80] The study used conflict data from the Human Rights Yearbook published by the Informal Sector Service Center in Nepal to consider the impact of conflict relative to other factors on migration rates.

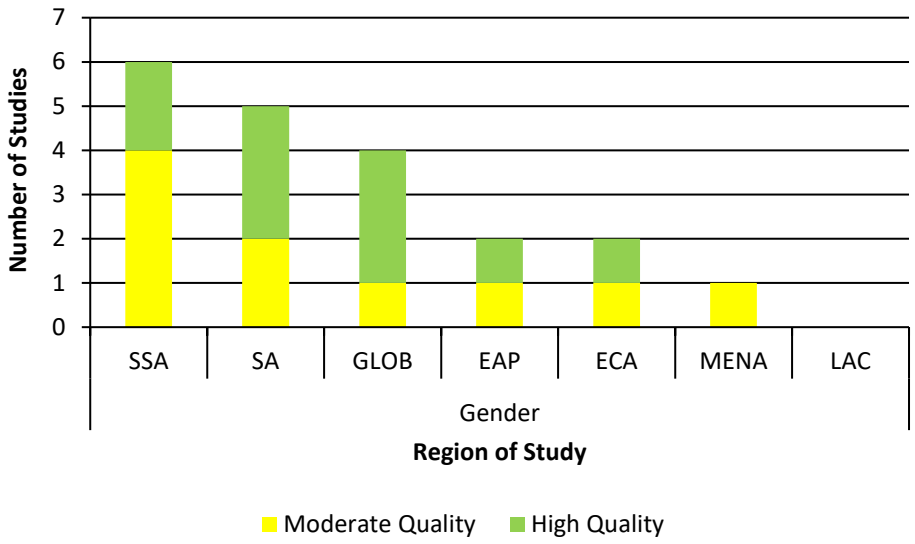

Figure 7. Distribution of structure and processes studies, by geographic context, and quality.
Note: Regional categories in the chart align with World Bank categories described on page 16.

Key Findings on Gender

- The effects of gender and livelihoods on migration patterns is a gap in the literature. Women are sometimes underrepresented in surveys, particularly those occurring in transit countries. Even where women are included, some studies fail to report the effects of gender as an intermediary factor.
- The evidence that does exist suggests that gender may have an influence on how livelihoods affect migration patterns, though the impact may be highly context specific. There is some limited evidence that education increases women's odds of migrating more than men's, and that women may be more likely than their male counterparts to migrate through regular channels.

Of the studies reviewed, just three dealt exclusively with female migration and livelihoods (Kudo, H, 2015; Reynolds, M, 2006; Silvey, M, 2006) and four specifically with migration by men (Lietaert, H, 2014; Bellak et al, M, 2014; Attanapola, M, 2013; Jónsson, M, 2008). The quality of the gender-specific studies is also generally moderate, with just one high-quality study each addressing male (Lietaert, H, 2014) and female (Kudo, H, 2015) migration.[81] Three studies covered Sub-Saharan Africa (Kudo, H, 2015; Reynolds, M, 2006; and Jónsson, M, 2008); the other four studies focused on Asia, specifically East Asia and the Pacific (Silvey, M, 2006), South Asia (Lietaert, H, 2014; Attanapola, M, 2013), and Europe and Central Asia (Bellak et al, M, 2014). There were no discernible geographic trends based on the gender considered.

[81] The methodological approaches of the studies are also mixed, with half of the studies on women using qualitative methods and half quantitative, while three of the four studies on men were qualitative.

While many of the non-gender specific studies do attempt to measure or control for gender differences in their analysis, others struggle to ensure equal representation of both genders in their research sample or do not account for it in their analyses. Koser and Kuschminder (H, 2016), for example, reported that 90 percent of respondents to their survey of migrants in Greece and Turkey were men, though the survey was not intended to be gender specific. Similarly, Collyer et al (H, 2013) reported difficulty ensuring sufficient representation by women in their survey in Morocco. Studies based on cross-sectional surveys and descriptive statistics in particular often do not disaggregate their findings by gender or control for gender when analysing and reporting their results.

The limited evidence that does exist suggests that gender, and by extension family composition, may have an important impact on how livelihoods opportunities and constraints affect migration. Several studies found evidence that men are more likely to move in response to changes in livelihood conditions (Massey et al, H, 2010; Winters, H, 2009) or more likely to report migration intentions (Gubhaju and De Jong, H, 2009; Heering, M, 2004). These differences are likely to be highly context and culture specific, however, as evidenced by the Danish Refugee Council's (M, 2016) survey of Eritrean, Somali, and Congolese refugees in Ethiopia.[82] While among Eritrean and Congolese refugees men were more likely to report migration intentions than women, Somali respondents who intended to move were approximately equally likely to be male or female.

There is also some evidence that differences in education levels may affect men's and women's migration decisions and aspirations differently—increasing migration probabilities for women. Three studies report this finding, all high quality. Hoti (H, 2009) finds that having higher education is significantly correlated with emigration for women, but not for men. Similarly, Yamauchi and Liu (H, 2012) find a statistically significant correlation between education and migration probabilities among women but not men. Further evidence comes from Gubhaju and De Jong (H, 2009) in South Africa who also find that higher levels of educational attainment increases the odds of married women migrating but is not statistically significant for married men.

Men and women may also prefer different types of migration, with women more likely to migrate regularly than men. A survey by Frouws (M, 2014) in Ethiopia found that among current migrants, women were more likely to have travelled via regular means than were men. Similarly, interviews by Bellamy (M, 2017) with Syrians in Turkey showed that women who aspired to migrate preferred regular migration (via resettlement) to moving irregularly. And Loschmann et al (M, 2014) found that men who had left Afghanistan were more likely to have migrated irregularly than were women who had also moved.

Finally, marriage may also affect women and men differently, though the evidence is inconsistent. While Hoti (H, 2009) finds that marriage increases women's odds of migrating and decreases men's, Gubhaju and De Jong (H, 2009) find the opposite effect, possibly indicating that marriage has a varied effect in different contexts.

[82] This study was based on a survey of 1,448 individuals across 10 refugee camps in Ethiopia.

6.0 ASSESSING THE EVIDENCE ON THE EFFECT OF LIVELIHOOD INTERVENTIONS ON INTERNATIONAL MIGRATION

This section will examine the evidence on the second research question:

> To what extent are ***livelihood interventions***[83] in origin, transit, or first asylum countries likely to have an identifiable impact on migration decisions among targeted groups and communities? What is the likely effect of different types of livelihood interventions applied?

Viewed broadly, livelihood interventions are typically designed to affect one or several discrete elements of the sustainable livelihoods framework—such as livelihood assets like financial or human capital or access to markets for labour or goods. Because interventions change the resources available to households and individuals or alter the context in which livelihoods are built, interventions may be expected to influence migration aspirations and decisions. The literature identified by the REA has posited three primary theories for how livelihood interventions may shape migration: (1) by improving the ability of target populations to earn a sustainable living locally, interventions may reduce the pressures that generate a desire or need to migrate. Alternatively, (2) livelihood interventions could remove financial constraints that had previously hampered migration, leading to more movement. Finally, (3) interventions may increase migration aspirations if they increase human capital or other assets without also creating opportunities to use and invest those assets locally and foster better livelihood outcomes.

For the purposes of the REA, MPI sought to identify evidence on four categories of livelihood intervention: (1) interventions that increase financial resources such as cash transfers and microfinance, (2) interventions that seek to improve human capital assets through education or training, (3) programmes to improve productive capacity including business development and agricultural support, and (4) employment support initiatives such as job matching or cash-for-work programmes. Figure 8 illustrates the spread of evidence by the categories above, geographic region, and quality.

Compared to the literature assessing how livelihood opportunities affect individuals' and households' migration aspirations and decisions, there are relatively few studies that directly assess the effect of livelihood interventions on international migration. Just 16 studies were identified in the REA as providing evidence on livelihood interventions, one of which was a secondary review. Where evaluations do consider effects on migration, as in evaluations of Assisted Voluntary Return and Reintegration programmes or some recent projects targeting refugees, the data used to do so is most often cross-sectional and restricted to measuring migration intentions or aspirations, limiting the strength of the evidence provided. An exception can be found in the experimental and quasi-experimental studies conducted of some cash transfer programmes, as will be discussed below; however, studies in this area

[83] Livelihoods interventions are defined as programmes, whether organised by government or non-governmental actors, designed to improve the capacity of the target group to meet its basic needs.

have been limited in geographic scope primarily to Latin America and have produced conflicting findings.

The following sections first consider intervention areas that have been more extensively covered by the existing evidence base, before turning to interventions where the REA finds that evidence on migration effects is still lacking.

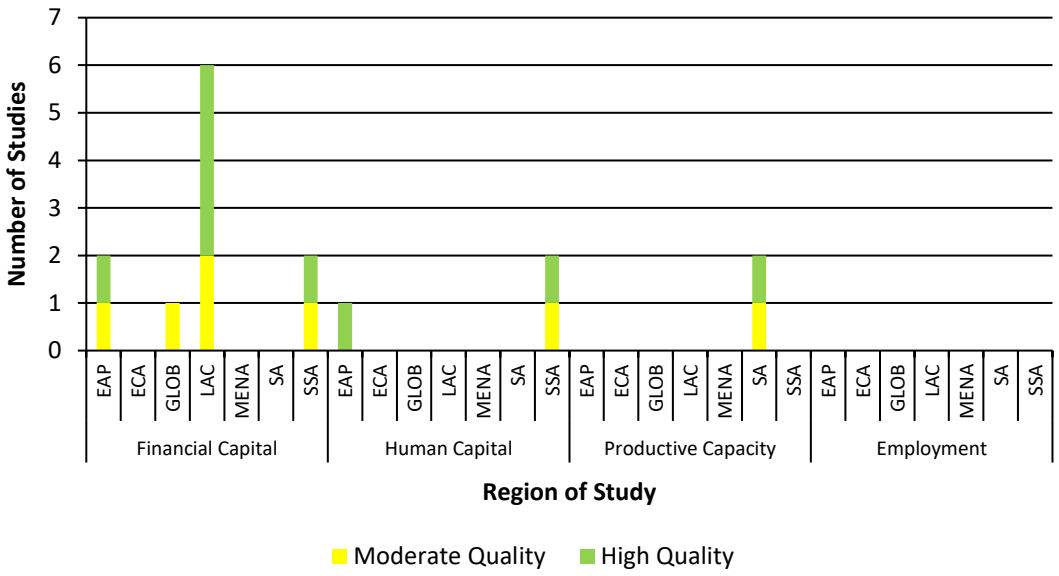

Figure 8. Distribution of studies on livelihood intervention, by type of intervention, geographic context, and quality.
Note: Regional categories in the chart align with World Bank categories described on page 16.

Key Findings on Livelihood Interventions

- Livelihood interventions that increase a household's financial resources without applying conditions, such as **unconditional cash transfers** or **microfinance**, may facilitate migration by providing the resources to realise existing migration aspirations. **Conditional interventions**, by contrast, may decrease migration by requiring recipients to remain in the origin community to receive programme benefits. The evidence on both points is, however, dominated by studies in Latin America, and further research in other contexts is needed.
- **Education and training** interventions that improve beneficiaries' skills but do not lead to work after the end of the programme may increase migration aspirations. More research is needed, though, on whether aspirations lead to actual migration in the medium and long term.
- Very few studies exist on the impact of business development initiatives, agricultural interventions, cash-for-work, or remote work programmes.
- Finally, the evidence on livelihood interventions and migration in **forced migration contexts** is extremely limited. Given the growing emphasis on developing livelihoods among refugees in first asylum countries, the lack of research on this point constitutes a major evidence gap.

6.1 INTERVENTIONS TO INCREASE FINANCIAL RESOURCES

The REA identified evidence on three types of financial interventions: conditional cash transfers, unconditional cash transfers, and microfinance programmes. None of these studies considered the effects of financial interventions in the context of forced migration. Given the growing emphasis placed on the use of cash rather than in-kind assistance in refugee situations, the lack of evidence on the effects of such programmes in first asylum countries is a major gap.

6.1.1 CONDITIONAL CASH TRANSFERS

Conditional cash transfer (CCT) programmes have been the most well-covered, though evidence primarily draws on Latin America.[84] These studies come to mixed conclusions regarding the effects of CCTs, with some studies concluding that conditional transfers may reduce migration in the short term while others find no effect.

Four studies specifically evaluated the effects of the Progressa cash transfer programme in Mexico (Stecklov et al, H, 2005; Angelucci, H, 2013 and H, 2004; and Tirado-Alcaraz, M, 2014). The design of Progresa (later renamed Oportunidades) provided researchers with a unique opportunity to conduct experimental research on the effects of a particular intervention. Evaluation data gathered over successive years on Progresa beneficiaries included a control group of similar non-participant households and contained indicators of actual migration from beneficiary households.

While the Progresa studies were generally of high quality, they reach conflicting conclusions regarding Progresa's impact on migration. Research by Stecklov et al (H, 2005) concluded that Progresa may have slowed the growth in migration to the United States among participant communities. While absolute migration rates increased in both beneficiary and control households over the study period, the authors found that participation in Progresa decreased the probability that households reported having a migrant abroad, when compared with control households.[85] There was, however, no difference in the probability of internal migration between treatment and control households. The authors suggest that the conditions placed on participation in Progresa for adults, i.e. participation in periodic health checks, may have made it possible to migrate shorter distances while still meeting the Progresa requirements but limited participants' ability to engage in international migration.[86]

Other studies of Progresa have, however, come to different conclusions about its impact. A similar analysis by Tirado-Alcaraz (M, 2014) found no statistically significant evidence that

[84] Six primary studies included in the REA examined CCT initiatives (Stecklov et al, H, 2005; Deshingkar et al, M, 2015; Angelucci, H, 2013 and H, 2004; Winters et al, H, 2009; and Tirado-Alcaraz, M, 2014) and one secondary study (Hagen-Zanker et al, M, 2013).
[85] The finding was statistically significant.
[86] The study found no significant difference in Progresa's effects on migration based on initial household income, and was not able to determine whether Progresa affected the type of migration undertaken.

Progresa altered international migration (specifically for labour reasons) among beneficiaries, though the analysis did suggest Progresa participation reduced the probability of internal migration. Further conflicting evidence is provided by Angelucci (H, 2004; H, 2013) on labour migration probabilities of Progresa households. Angelucci's 2004 and 2013 analyses of Progresa data found that the cash transfers increased households' probability of having a U.S. migrant on average during the course of the programme,[87] with greater effects for households that previously had not undertaken international migration, while domestic migration probabilities do not change. The author attributed the higher migration probabilities to an increased ability of marginal households to finance international migration through the cash grant.

Angelucci's 2004 study, however, nuances these findings further by disaggregating the data on households that had elementary versus secondary school age children. The analysis found that the effects were largest for households with elementary age children while migration probabilities actually decreased in households with children in secondary school. The author posits that this difference may indicate that the conditional grants have caused youth who would otherwise migrate to remain in school, while for households with elementary age children the cash transfer could be considered unconditional, given the high rate of elementary school attendance.

The conflicting findings of these studies are, however, difficult to reconcile. Differences in the methodology of the studies, including the study samples to some extent limit their direct comparability. While Stecklov et al, for example, examine all forms of migration from Mexico, Angelucci's studies consider only labour migration. Moreover, Angelucci and Tirado-Alcaraz examine migration outcomes at the individual level, while Stecklov et al consider the household level. These variations in study design make it difficult to explain the differences in the studies' findings. In addition, it is important to note that both Stecklov et al and Angelucci primarily examined the effects of Progresa over the short-term, and thus only reflect the effects of the cash transfers and not the education interventions applied to children in Progresa households. Examining the Progresa baseline data Stecklov et al find that households with higher levels of education were more likely to engage in international migration, and hypothesise that Progresa may thus increase migration over the longer term.

Just two primary studies examined by the REA evaluated the effects of CCTs outside of Mexico. Winters et al (H, 2009) used evaluation data from the Red de Proteccion Social (RPS) programme in Nicaragua, introduced between 2000 and 2002 and designed to be similar to Progresa. RPS required households to receive regular health checks and children under age 13 to attend four years of primary school. The similar structure of RPS to Progresa allowed researchers to apply a similar experimental approach to analyse the effects of the intervention on migration. Winters et al found no statistically significant differences in migration probabilities between treatment and control households, though when tested for age differences, the analysis suggested that older adults were less likely to migrate in the

[87] The findings are statistically significant.

control than in the treatment group. It is important to note, however, that Winters et al's analysis does not distinguish between international and internal migration.

A qualitative study of conditional cash transfers in Malawi, Ethiopia, and Tanzania (Deshingkar et al, M, 2015) had similarly inconclusive results regarding the effects on migration. Interviews with transfer beneficiaries provided no evidence that transfers had altered international migration patterns, though some effects on the type of domestic migration beneficiaries undertook were observed. In Malawi, some interviewees reported that cash benefits had allowed them to migrate internally for education reasons rather than work. A secondary review by Hagen-Zanker and Himmelstine (M, 2013) also found that the evidence on conditional cash transfers was mixed, with studies producing varied findings regarding the effects of CCT on international migration.

6.1.2 UNCONDITIONAL CASH TRANSFERS

A limited body of evidence suggests that unconditional cash transfers (UCT) may facilitate more migration in some contexts. Mahendra's quasi-experimental study (H, 2014)[88] of the Bantuan Langsung Tunai (BLT) UCT found that transfers had no significant effect on international migration, though the probability of internal migration increased. The author suggests that the effects may have been significant for internal but not international migration because of the greater costs of international migration—the size of the UCT thus may not have been large enough to overcome financial constraints limiting international migration. Deshingkar et al's 2015 qualitative study of a UCT's beneficiaries in Kenya (M, 2015) found two cases out of 20 interviewees where transfers had been used to fund migration, both internal. Angelucci's analyses of Progresa data (H, 2004; H, 2013) provide some further evidence on UCTs. Because elementary school attendance was already high among Progresa beneficiaries, Angelucci suggests that transfers to families with elementary age children could be viewed as unconditional (i.e. families were not required to change their behaviour to participate in the programme). Angelucci (2004) finds that migration probabilities increased among families with primary aged children while they decreased for families with children in secondary school; the author suggests the finding indicates that unconditional transfers may facilitate migration while conditional transfers that require the presence of all household members limit migration. Angelucci (2013) further finds for families with primary aged children, the effects are greater for potential international migrants in the middle of the local skills distribution (Angelucci, H, 2013).[89] Similarly, evidence from interviews by Deshingkar et al (M, 2015) in Tanzania suggested that children of CCT beneficiaries often migrate as soon as they complete school, a condition of the cash transfer programme.

[88] The author used longitudinal data from the Indonesian Family Life Survey (IFLS).
[89] The 2013 study also finds evidence that these new journeys are financed through loans that use the cash transfer receipts as a guarantee.

6.1.3 MICROFINANCE

Microfinance programmes may also affect migration decisions by increasing the access of households and individuals to financial capital. Three studies identified by the REA considered the impact of microfinance on international migration, all drawing on qualitative data. Interviews by Bylander (M, 2014)[90] in Cambodia found evidence that, rather than facilitating improved livelihoods locally, the increased availability of credit has been used by many households to support the migration of household members for work, most often to Thailand. Bylander reports that households viewed migration as a more secure investment than local livelihoods, which were seen as "high-risk, passive, unprofitable and low status." Such views were intensified by frequent environmental disruptions that made agricultural livelihoods unappealing. Bylander suggests that the use of microloans to finance migration is the result of a mismatch between secure local investment opportunities and the availability of credit: while households' access to financing has expanded, opportunities to use funds to build livelihoods locally have not, causing many households to fall back on migration as the most secure investment. A qualitative study by Mallett et al (H, 2017) with Eritrean refugees in Ethiopia documented a similar disconnect between the availability of finance and local investment opportunities: while livelihood support programmes provided financing for refugees to establish micro-enterprises, refugees reported that the local market was not conducive to sustaining small businesses and most beneficiaries still aspired to migrate onward.

An ethnographic study by Stoll (M, 2010) of a Guatemalan community that experienced an expansion in the availability of microfinance also documented the use of loans to facilitate migration. Stoll records the creation of a debt-migration bubble, where easily accessible credit (guaranteed by the promise of remittances) drove an increase in migration. Once households were in debt, additional migration became a necessity in order to pay back previous loans.

6.2 INTERVENTIONS TO INCREASE HUMAN CAPITAL ASSETS

Compared with financial interventions, few studies have considered the influence of education and training interventions on migration aspirations and decisions. Of the three studies identified by the REA, two were based on either qualitative field work or cross-sectional survey data and both were conducted in forced migration contexts.

Two studies considered the influence of vocational training on migration aspirations in refugee situations. Participants in Mallet et al's qualitative study (H, 2017) of Eritrean refugees in Ethiopia reported frustration that they were unable to use the skills they developed through training programmes, in part because of the limited ability for refugees in Ethiopia to obtain work in the formal sector. As a result, many still hoped to move on to other destinations where they could utilise their skills. Similarly, a Norwegian Refugee

[90] The author conducted 89 semi-structured interviews with residents and key informants in a region of northwest Cambodia that has experienced an expansion of microfinance institutions.

Council and Samuel Hall evaluation (M, 2014) found that participants in training programmes were more likely to desire to migrate onward than non-participants. Looking at the Youth Education Pack programme specifically, the evaluation found that after a year approximately a quarter of training beneficiaries had already left the country and of those left, two-thirds aspired to migrate.

The REA identified just one study in a non-forced migration context. Yamauchi and Liu (H, 2012) used a quasi-experimental design to test the effects of an intervention designed to improve the quality of primary and secondary education among poor communities in the Philippines. Using data from surveys conducted among students in districts targeted by the intervention and similar control groups, Yamauchi and Liu found that the improvement in educational outcomes for beneficiaries (measured by years of schooling completed and college entrance rates) was accompanied by an increased probability of migration after leaving school for females, though not for males. The authors posit that the different migration impacts by gender are due to the higher returns on education when working abroad for women relative to men. It is important to note, however, that the study does not distinguish between internal and international migration.

6.3 INTERVENTIONS TO SUPPORT PRODUCTIVE CAPACITY

The REA found very little evidence regarding livelihood support programmes intended to increase beneficiaries' productive capacity (i.e. interventions to support business development or agricultural production). The two studies identified examined business development programmes; both were conducted in the context of Assisted Voluntary Return and Reintegration (AVRR) support initiatives in Afghanistan. No studies reviewed in the REA considered the impact of agricultural interventions.

Both AVRR studies found most participants still expressed a desire to remigrate after the conclusion of AVRR support and the associated business development programme. Altai Consulting's interviews with 100 AVRR beneficiaries (M, 2009), nearly 90 percent of whom chose to receive small business support upon return, found that more than two thirds of interviewees desired to remigrate from Afghanistan. Insecurity, low income, and employment difficulties were the most commonly reported reasons for the desire to remigrate. Interviews by Strand et al (H, 2008) with 29 AVRR beneficiaries, all of whom received business development support, similarly found that most stated an intention to remigrate for economic reasons. Both studies, however, examine the short-term effects of the programmes, and only considered remigration aspirations. Neither tested the statistical significance of their findings.

6.4 INTERVENTIONS TO SUPPORT EMPLOYMENT

While interventions to support employment, such as cash-for-work or job matching programmes, are another common type of livelihood intervention, the REA did not identify any studies that considered the effects of these types of interventions on migration. While job matching was a component of the AVRR programmes evaluated by Strand et al and Altai Consulting, very few beneficiaries opted to receive this type of support, making it impossible

to evaluate the effects of the programme. More research in this area is needed, particularly in the context of forced migration as more refugee livelihoods development programmes turn to remote work or impact-sourcing initiatives to connect refugees with work.

7.0 CONCLUSIONS AND RECOMMENDATIONS FOR FURTHER RESEARCH

This Rapid Evidence Assessment set out to explore the effects of livelihood opportunities and livelihood interventions on migration patterns. The REA examined 121 moderate and high-quality studies on the effect of both factors on migration aspirations, decisions, and actions.

The existing body of literature offers some broad insights into the links between the availability of livelihood opportunities and migration patterns. With regards to livelihood interventions, the literature is very small but points to one emerging finding supported by relatively consistent evidence.

7.1 CONCLUSIONS ON LIVELIHOOD OPPORTUNITIES

The REA identified a large body of evidence on livelihood opportunities. The findings on financial, social, human capital, and environmental trends were supported by a strong or medium evidence base. Other aspects of the livelihood opportunities framework were supported by a limited body of evidence. This literature points to several emerging findings on the effect of livelihood opportunities on migration patterns:

1). Greater livelihood assets may facilitate more actual migration in certain contexts: Large bodies of evidence on the effects of financial and social capital have produced relatively consistent findings that having greater financial resources or more extensive social networks (both at origin and destination) is correlated with a greater probability of actually migrating. Similarly, those with higher levels of educational attainment are more likely to actually migrate. The literature suggests that financial resources and social connections are necessary to cover the costs of migration and obtain information about routes and opportunities at destination. Education may help facilitate migration by enabling better access to opportunities abroad.

2). Educational attainment may increase migration and migration aspirations, though enrolment in school could decrease migration in the short term: Individuals with at least some secondary school appear more likely to migrate than those with limited education or post-secondary or tertiary education. The research is not clear, however, on the reasons underlying this trend. While those with more education may be more likely to aspire to migrate, educated individuals may also have more opportunities to migrate. Being enrolled in school, though, may decrease migration, at least in the short term.

3). A perceived lack of employment or livelihood opportunities may contribute to migration aspirations: There is an emerging consensus in the evidence that a perceived lack of employment or livelihood opportunities can contribute to migration aspirations, particularly among refugees in first-asylum countries. Much of the evidence on this point, however, comes from descriptive statistics and cross-sectional surveys, and the statistical significance of these findings and the extent to which such aspirations translate into migration decisions or actual migration is thus not yet known.

4). A desire for higher salary or better career prospects can be driver of migration aspirations, particularly for the high-skilled: Several high-quality quantitative and qualitative studies provide evidence that a desire for a better salary and better career advancement opportunities is correlated with aspiring to or actually migrating. However, the size and geographic coverage of the evidence is small, and is most conclusive for those employed in the medical field.

5). In contexts where migration occurs in response to negative environmental trends or conflict, migration decisions appear to occur at the household level as part of a risk mitigation strategy: Studies on the effects of negative environmental trends and conflict found consistent evidence that decisions regarding migration in these situations are often made at the household, rather than individual level. In contexts where existing livelihood strategies have become insufficient to meet a household's needs or goals, because of environmental degradation or the loss of key assets due to conflict for example, households may choose to mitigate economic risk by engaging in migration as an alternative or complementary livelihood strategy. Who and how many household members migrate appears to be dictated to some extent by the costs of migration and available financial resources. Similarly, there is some evidence that cost factors into destination choices, with international destinations often more expensive than destinations closer to the origin community.

6). Negative environmental shocks and long-term trends that impact livelihoods are likely to lead to internal rather than international migration: A medium size body of evidence of moderate quality provides very consistent findings that, while natural disasters and long-term environmental degradation may disrupt livelihoods and cause displacement, those affected are most likely to relocate short distances. Where migration aspirations and intentions are considered, the studies reviewed consistently found a preference for adaptations in place or local moves over international migration. When actual migration is examined, the likelihood of migrating internally is consistently found to be greater than for international migration.

The evidence on livelihood opportunities clearly highlighted the highly contextual nature of migration aspirations, decisions, and actions. While some broad trends can be observed across countries, the variability in how migration patterns evolve in specific contexts means it may be problematic to assume that a particular livelihood factor will translate into more or less migration across contexts. Rather, the evidence provided by the studies makes it clear that migration aspirations, decisions, and actions are inherently shaped by:

- perceptions about the availability and desirability of strategies locally to meet livelihood needs and goals, and similarly, perceptions about the desirability of migration as an alternative or supplemental livelihood strategy;
- the information households and individuals have about specific migration opportunities available to them and how to realise their migration aspirations;
- the actual costs of migration (in both financial and human security terms) and the ability and willingness of households or individuals to meet these costs.

7.2 CONCLUSIONS ON LIVELIHOOD INTERVENTIONS

The body of evidence on livelihood interventions is much more limited in size, scope, and consistency than that identified on livelihood opportunities. Very few livelihood interventions have been evaluated for their effects on international migration. Only conditional cash transfers were found to be the subject of multiple high-quality studies, several of which had an experimental or quasi-experimental design. The findings of these studies, however, point in different directions and have been primarily conducted in the context of the Progresa cash transfer programme in Mexico, limiting the strength of the evidence.

The evidence on micro-finance and education programmes contains just one high quality study each, and is primarily qualitative in nature. Business development programmes were similarly poorly covered in the literature. The REA identified no evidence on agricultural support initiatives, cash-for-work, or job matching programmes.

When unconditional financial interventions are considered together, however, the evidence does point to some consistent findings. Studies on unconditional financial transfers, including cash transfers and microfinance programmes, consistently found that such programmes may actually facilitate migration by removing financial barriers to mobility, particularly in contexts where migration is already a well-established phenomenon. By contrast, some limited evidence on conditional financial transfers suggests that such programmes may constrain migration when the conditions require the physical presence of the recipients to fulfil (e.g. cash transfers requiring the enrolment of secondary students in school).

Broadly, the findings on both livelihood interventions and livelihood opportunities point to the importance of context in determining how livelihood interventions are likely to affect migration patterns.

7.3 EVIDENCE GAPS AND RECOMMENDATIONS FOR FURTHER RESEARCH

Several specific research needs and gaps can be identified in the evidence reviewed by the REA:

- ***More evidence on the effect of livelihood interventions on migration, particularly in forced migration contexts:*** The greatest need uncovered by the REA is for more extensive and robust evidence on the effects of livelihood interventions on migration. There is a particular need for evaluations and studies of education programmes, agricultural and business development programmes, and job matching initiatives to consider migration impacts. In addition, given the increased emphasis placed on developing livelihoods in countries of first asylum, there is a clear need for evidence on how interventions affect the development of aspirations among refugees to migrate onwards and effective action in this regard. Systematically

earmarking a portion of the budget for these programmes for robust evaluations that consider migration effects would help to fill this evidence gap.

- ***Greater consideration of the effects of intermediary variables such as gender on the relationship between livelihoods and migration:*** Relatively few studies robustly considered the impact of sociodemographic intermediary variables such as gender. While there is some evidence to suggest that women's migration aspirations and behaviours react differently to changes in their livelihoods circumstances than men, women are sometimes underrepresented in or excluded from studies.
- ***Better evidence on the medium- and long-term effects of livelihoods opportunities and interventions:*** Literature on both livelihoods opportunities and interventions suffers from a lack of longitudinal data on how migration aspirations and actual actions change over time. A large number of studies, particularly on aspirations, are based on cross-sectional survey data that does not capture how or whether aspirations translate into decisions and action. Data that reflects actual migration is similarly limited, as it can only record whether or not the act of migrating occurred at a point in time and does not capture the evolution of the decision making process. In order to fully capture the effects of livelihoods on migration aspirations and decisions, longitudinal data is needed.
- ***More clarity and consistency across studies in how key concepts are defined and measured and how relationships between variables are analysed:*** The studies identified by the REA demonstrate a great deal of variation in how critical concepts, including migration, are defined and subsequently measured and in the conceptual and methodological approaches used to examine relationships between different factors and variables. Establishing some basic standards regarding how studies are conducted—or at a minimum, standards regarding the clarity with which the conceptual and methodological approaches are reported—would enable better comparison of studies across contexts.
- ***Conduct research in a greater variety of contexts, including low migration contexts:*** While high migration contexts have an understandable appeal for researchers interested in understanding migration patterns and trends, the evidence base would benefit from more comparative research on *low migration contexts.* In particular, additional qualitative studies in these contexts would help to shed light on why individuals and households do not aspire or decide to or actually migrate, in comparison with higher migration contexts.

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APPENDIX A: KEYWORDS AND SEARCH STRINGS

Keywords and Synonyms by Categories and Sub-Categories

Categories and Sub Categories			Key Words and Synonyms
Migration			migration; mobility; migrant; emigration; emigrant; refugee
Drivers			drivers; driver; reason; reasons; determinant; determinants; impacts; impact; effect; effects; relationship; push; trigger
Livelihood Context	Trends	Population trend	fertility; life expectancy; urbanization; population; demographic dividend
		Economic trends	gross domestic product; income; wages; unemployment; underemployment; inflation; currency; interest rates; balance of payments; balance of trade; labour force participation; economic participation
		Governance trends	governance; government; politics; election
		Technological trends	technology; innovation, automation
	Shocks	Human health shocks	health; epidemic; serious illness; famine; virus
		Natural shocks	disaster; flood; flooding; drought; typhoon; cyclone; earthquake; volcanic eruption; tsunami; landslide; mudslide; erosion; fire; hurricane; tornado; climate
		Economic shocks	financial crisis; job loss; economic downturn; business closure; mass layoffs; wage cuts; loss of remittances; public spending cuts; income shock
		Conflict	conflict; social unrest; civil unrest; violence; crime; refugees; insurgency; uprising; violent; war
	Seasonality	Prices	price cycles; price fluctuation
		Production	production cycles; production fluctuation
		Health	seasonal health patterns
		Employment opportunities	seasonal employment; circular
Livelihood Assets	Human capital		human capital; enrolment; enrollment; educational attainment; education; learning; skills; talent; knowledge; training; qualifications

	Social Capital	social capital; personal relationships ; network; networks; civic engagement; trust; reciprocity
	Physical Capital	infrastructure; transportation; shelter; shelters; water supply and sanitation; energy; information; communications
	Natural Capital	land; forests; water; air quality; biodiversity; arable; desert; forest; soil quality; water quality
	Financial Capital	financial capital; cash; bank deposits; assets; pensions; remittances; loans; debts; credit; savings
Livelihood Interventions	Interventions aimed at directly improving livelihood assets of the beneficiaries	livelihood; livelihoods; skills training; vocational training; apprenticeship; entrepreneurship training; CTA; community technology access; remote work; financial literacy; food aid; food for work; cash for work; cash grants; seed; microfinance; micro-finance; low interest loans; cash assistance; business development; voluntary return; remigration; re-migration; reintegration assistance
	Interventions aimed at improving the livelihood context by supporting the overall functioning of the market and production processes	vouchers; commodity vouchers; cash vouchers; subsidised sales; subsidized sales; monetization; monetisation; de-stocking; destocking; agricultural support; livestock; fishing support; fishing tools; restocking; re-stocking; conditional grants; job creation

Sample Search Strings

Google Scholar

Migration AND driver OR drivers OR reason OR reasons OR determinant OR determinants

AND “Financial crisis” OR “job loss” OR “economic downturn” OR “business closure” OR “mass layoffs” OR “wage cuts” OR “loss of remittances”

Migrant AND impact OR impacts OR effect OR effects OR relationship OR push OR trigger AND Infrastructure OR transportation OR shelter OR shelters OR “water supply and sanitation” OR energy OR information OR communications

RePEc

~ integration + (migration | mobility | migrant | emigrant | emigration | Refugee) + (drivers | driver | reason | reasons | determinant | determinants | Impacts | Impact | Effect | effects | Relationship| push | trigger) + (“Price cycles” | “price fluctuation” | “production

cycles” | “production fluctuation” | “seasonal health patterns” | “seasonal employment” | circular)

~ integration + (migration | mobility | migrant | emigrant | emigration | Refugee) + (drivers | driver | reason | reasons | determinant | determinants | Impacts | Impact | Effect | effects | Relationship| push | trigger) + (Vouchers | “commodity vouchers” | “cash vouchers” | “subsidised sales” | “subsidized sales” | monetization | monetisation | de-stocking | destocking)

ODI

Migration OR Migrant OR Emigration OR Emigrant OR Refugee AND driver OR reason OR determinant OR impact OR effect OR relationship

Experts Consulted

Jessica Hagen-Zanker, Overseas Development Institute

Hein de Haas, University of Amsterdam

Nassim Majidi, Samuel Hall

Marie McAuliffe, International Organization for Migration

Michael Collyer, University of Sussex.

APPENDIX B: FULL SEARCH RESULTS

Databases Searched

Database Searched	Search Hits
Google Scholar	3,840
RePEc	1,830
Academic Search Complete	1,543
ODI	438
3iE	185
ePPi Centre	163
ALNAP	106
Migrating out of Poverty	67
Research for Development	53
TOTAL	***8,225***

Research Organisations Searched

Organisation	Articles Reviewed for Relevance
IZA	589
IOM	344
CReAM at UCL	306
Oxford IMI	258
Oxford COMPAS	249
OECD	114
UNHCR	100
Oxford RSC	76
World Bank	57
IDS, University of Sussex	53
Center for Global Development	47
MPI	18
SLRC	7
TOTAL	***2,218***

APPENDIX C: QUALITY ASSESSMENT FRAMEWORK

Quality Assessment Framework for Primary Studies

Principles of Quality	Score
1. Conceptual Framing The study (i) constructs a conceptual framework for investigation that draws on previous research and sets out the study's main assumptions; and (ii) poses a clear research question and/or outlines a hypothesis. • Highest score (3): The study identifies a conceptual framework that is based on previous research and clearly frames the study with a research question or hypothesis. • Middle score (2): The study identifies a clear research question but does not develop a conceptual framework. • Middle score (1): The study outlines a conceptual framework but lacks a clear research question. • Lowest score (0): The study satisfies none of the sub-criteria. It provides no review of previous research or theory and lacks a conceptual framework and a clear research question or hypothesis.	(0-3) x 1 Out of 3
2. Transparency The study (i) presents the raw data it analyses or explains how these can be accessed by the reader; (ii) identifies the geographic context in which the study was conducted; and (iii) declares sources of funding for the research. • Highest score (3): The study satisfies all sub-criteria. The study is fully transparent about the data used in the analysis. It also identifies the geographic context in which the study was conducted and the funding sources. • Middle score (2): The study satisfies only two of the three-sub criteria. • Middle score (1): The study satisfies only one of the three sub-criteria. • Lowest score (0): The study satisfies none of the sub-criteria. It does not present or provide directions on accessing the data, nor does it disclose the context of how the study was conducted and its funder/s.	(0-3) x 1 Out of 3
3. Appropriateness The study (i) clearly describes the research design and method; and (ii) demonstrates why the chosen design and method are well suited to the research question or hypothesis. • Highest score (3): The study clearly outlines a research design and method, and demonstrates convincingly that these suit the research question or hypothesis. • Middle score (2): The study provides information on why the research design and method were chosen, but some concerns exist regarding the appropriateness of the approach. • Middle score (1): The study outlines a research design and method but does not provide an explanation as to why the chosen approach is appropriate to answering the research question. • Lowest score (0): The study design is considered inappropriate for the answering the research question.	(0-3) x 1 Out of 3
4. Validity	(0-3) x

The study (i) uses indicators that are well-suited to measure the relationships or concepts being studied (measurement validity); (ii) is designed in a manner that allows it to clearly explore the effect of one variable on another variable (internal validity); and (iii) and demonstrates that the methods/design employed had minimal impact on the relationships studied or accounts for this in the analysis (reflexivity). • Highest score (3): The study satisfies all sub criteria. It clearly and credibly measures the relationships it sets out to measure. • Middle score (2): The study satisfies only two of the three sub criteria. • Lowest score (1): The study satisfies only one of the sub-criteria. • Lowest score (0): The study satisfies none of the sub-criteria. It employs measures that do not capture effects or key relationships in a credible way.	2 Out of 3
5. Reliability The study applies measures that are stable and capable of producing consistent results (e.g., sampling choices ensured a representative sample, and steps were taken to ensure that the researchers are consistent in the way they ask questions and gathered data). The research includes reflections on whether the measures and analytical technique used would allow the study to be replicated with similar results. • Highest score (3): The study demonstrates it applies consistent (i.e., stable) measures and an analytical technique that, when repeated, it would produce the same results. • Middle score (2): Some concerns exist as to whether or not the technique applied resulted in consistent measurement, but the study reflects on the possible influence of these factors on the data gathered. • Middle score (1): Some concerns exist regarding whether the measures applied would produce consistent results, and the study does not address these. • Lowest score (0): The study provided no explanation of measurement technique or the technique applied was inconsistent.	(0-3) x 1 Out of 3
6. Cogency The study (i) arrives at conclusions that are clearly based on the results; and (ii) explains the analysis' limitations and/or offers alternative explanations. • Highest score (3): The study satisfies all sub criteria. It avoids making conclusions that are not clearly backed up by the data and findings, and is self-critical. • Middle score (2): The study arrives at conclusions that are clearly based on the research results, but does not provide alternative explanations or reflect on the limitations of the analysis. • Middle score (1): Some concerns exist regarding whether the conclusions drawn are fully supported by the study results. • Lowest score (0): The conclusions are not clearly based on the results of the study and	(0-3) x 2 Out of 3
ASSESSMENT SCORE	**0-24**

Scoring:

0-10: Low, major deficiencies in attention to principles of quality

11-18: Moderate, some deficiencies in attention to principles of quality

19-24: High, comprehensively addresses multiple principles of quality

Quality Assessment Framework for Secondary Studies

Principles of Quality	**Score**
1. Conceptual Framing The study poses a research question and/or outlines a hypothesis. • Highest score (1): The study poses a clear research question • Lowest score (0): The study fails to pose a clear research question.	(0-1) x 1 Out of 1
2. Coverage The study (i) provides information on how the literature base was identified; (ii) demonstrates the literature search was comprehensive; and (iii) offers compelling and relevant criteria for inclusion and exclusion from the review. • Highest score (3): The study satisfies all three subcriteria. • Middle score (2): The study satisfies only two of the three subcriteria: The study provides details on how literature was identified and demonstrates the search was comprehensive but does not provide compelling and relevant criteria for inclusion/exclusion. • Middle score (1): The study satisfies only one of the three subcriteria. The study only provides details on how literature was identified. • Lowest score (0): The study fails to provide information on how the literature was identified and selected for inclusion.	(0-3) x 1 Out of 3
3. Quality Assessment The study identifies and evaluates the main methodologies and research techniques used in the studies reviewed. • Highest score (3): The study evaluates or critiques the research methods used for appropriateness, validity, and reliability. It provides an assessment of the quality of the evidence base as a whole. • Middle score (2): The study provides some assessment of the methodological quality of individual studies, but does not assess the quality of the evidence base. • Middle score (1): The study provides some discussion of research methods used by the individual studies considered, but does not evaluate their quality. • Lowest score (0): The study fails to discuss research methods.	(0-3) x 1 Out of 3
4. Cogency The study (i) arrives at conclusions that are clearly based on the results of the studies reviewed; and (ii) explains the study's limitations and/or alternative explanation of the analysis. • Highest score (3): The study satisfies all sub criteria. It avoids making conclusions that are not clearly backed up by data and findings and is self-critical. • Middle score (2): The findings of the study are based on the evidence reviewed, but the study does not reflect on the limitations of the analysis. • Lowest score (0): The study satisfies none of the sub-criteria. It fails to link the conceptual framework to the data and analysis and conclusions and does not identify the study's limitations or offer alternative interpretations.	(0-3) x 1 Out of 3

ASSESSMENT SCORE	0-10

Scoring:

0-3: Low, major deficiencies in attention to principles of quality

4-7-: Moderate, some deficiencies in attention to principles of quality

8-10: High, comprehensively addresses multiple principles of quality.

APPENDIX D: TABLE OF QUANTITATIVE STUDY FINDINGS

The table below presents key findings from 36 quantitative studies using regression analysis to analyse individual and household-level data. The table provides sample size, average migration rate within the sample, model type, independent and dependent variables, and the effect size reported in each study.

The table should be viewed with some caution, given that independent and dependent variables, research designs, key controls, and sample sizes vary widely between the studies. For example, among the three studies on rainfall, variables and research designs are not easily comparable. Yang and Choi (H, 2007) explore the effect of the previous years' rainfall shocks on the probability of international migration among households who did not previously have an international migrant. Henry et al (H, 2004) examine the effect of long-term changes and short-term shocks in rainfall on the probability of migration segmented by gender, length of time, and type of destination. Shrestha (H, 2017) looks at whether a change in farm income due to rainfall in the previous two years has an effect on village migration rates to both India and non-India destinations. As a result, each study contributes slightly different evidence to understanding the effect of rainfall on migration, but the direct effect sizes cannot be compared to one another due to the difference in independent variables as well as outcomes measured.

Effect sizes presented in the table below may also be difficult to interpret given that some authors reported regression results as odds ratios, while others provided marginal effects. In the table, odds ratios are presented as changes in the percentage probability of migration while marginal effects are given as percentage point changes in the probability of migration. Percentages show the effect size given a certain baseline probability, while percentage points give the effects regardless of the baseline. Without access to the mean outcomes, it is not possible to translate these two metrics to the same scale. Only 4 of the 26 studies presented the baseline probability of migration before and after treatment, and thus, effect sizes are given without baseline migration rates, but rather alongside the average migration rate for the sample population. Readers should note that effect size in most cases cannot be added to the average migration rate to determine the overall probability of migration.

Author and Year	Sample Size	Average Migration Rate	Model Type	Independent Variable	Dependent Variable	Effect Size
Abdel-Karim (2016)	1,100 households	Of all households in the sample, **31.6 percent** migrated illegally.	Logistic Regression	Having employment vs. not	Probability of irregular vs regular migration	Individuals who were employed before migrating are **32.1 percent**** less likely to have migrated through an irregular channel.
				Having higher than secondary education vs. not	Probability of irregular vs regular migration	Individuals who achieved higher than secondary education are **53.3 percent***** less likely to have migrated through an irregular channel.
				Rating financial situation in country of origin as "more than sufficient"	Probability of irregular vs regular migration	Individuals who rated their financial situation in their country of origin as "more than sufficient" are **61.6 percent**** less likely to have migrated through an irregular channel.
Abdulloev et al (2011)	4,860 households	**16.7 percent** of households sampled have a current international migrant.	Ordinary Least Squares	Household has a current migrant vs. not	Engaging in informal work (measured as log monthly household expenditure over reported income, i.e. excess expenditure)	Households with a current international migrant are correlated with **32.5 percent***** less informal work (i.e. excess expenditure) than households without international migrants.
Angelucci (2004)	11,506 households	In 1997 (before the treatment), average U.S. migration rate of treatment villages was **0.55 percent**, and of control villages **0.44 percent**.	Multinomial Logit	Receipt of cash transfer (PROGRESA)	Probability of labour migration to US relative to the control group	Receipt of conditional cash transfer increases the probability of a household having a migrant in the United States by **0.5 percentage points*** relative to the control group.
		Average internal migration rate of both treatment and control villages was 0.76 percent.		Receipt of cash transfer (PROGRESA)	Probability of internal labour migration relative to the control group	Receipt of conditional cash transfers has **no significant effect** on the rate of internal labour migration relative to the control group.
				Receipt of cash transfer with a low proportion of conditional grant (PROGRESA)	Probability of labour migration relative to the control group	Individuals in households with maximum conditional grant are **4 percentage points**** less likely to migrate than those in families with no eligible secondary school males.
Angelucci (2013)	10,787 households	Percentage of U.S. migrants in control villages is **0.7 percent**.	Ordinary Least Squares,	Eligible to receive cash transfer	Probability of household having a migrant in the United	Households eligible to receive cash transfers are **0.7 percentage points**** more likely to have a migrant in the United States relative to the control group.

			ATE		States relative to the control group	Households in the first wealth tercile (lowest third of wages) are **0.31 percentage points**** more likely to migrate to the United States than those in the control group. The effect on the second and third wealth terciles is insignificant.
				Having no previous U.S. migrants in the household	Probability of household having a migrant in the United States	Households that would have had no migrant in the United States in the absence of the treatment comprised **72 percent** of all additional migrations.
				Migration to the United States and location in treatment or control village	Size of loan	Loans taken out by households undertaking migration to the U.S. in treatment villages are **83 percent***** higher than those in control villages.
Bellak et al (2014)	3,193 individuals	**8.6 percent** of individuals in the sample undertook migration in the period studied.	Probit	Unemployed vs. not	Short-term migration to from Armenia to Russia	Individuals unemployed in 2006 were **1.42 percentage points***** more likely to have migrated short term to Russia between 2006 and 2010.
				Obtained tertiary education	Short-term migration to from Armenia to Russia	Individuals having obtained tertiary education were **2.35 percentage points*** less likely to have migrated short term to Russia between 2006 and 2010.
Bhandari (2004)	1,465 farming households	**24.0 percent** of farming households in the sample sent a migrant for work.	Logistic Regression	Ownership of khet land vs. no ownership of khet land.	Household migration status, having one member of the household away from home most of the time during the 6 months prior to survey.	Households that own khet land are **48.4 percent**** more likely to send a migrant for work.
Bohra and Massey (2009)	1,773 households, 5,271 individuals	**29 percent** of households reported at least one migrant. **6.5 percent** of households had a migrant within Chitwan Valley, **10.8 percent** to other areas of Nepal, and **10.7 percent**	Multinomial Logit	Average hours walk to nearest resource among health care, bus service, school, market, bank, employment, police station, yearly	Likelihood of migrating for the first time to another destination in Chitwan/another area of Nepal/internationally	An increase of average distance to nearest resource by one hour is correlated with a **39.4 percent***** decrease in the likelihood of migrating internationally in the following year while having no statistically significant effects on migration within Chitwan Valley or Nepal.

		outside Nepal.		event.	one year later	
				Percentage of within Chitwan/ to other areas of Nepal / international migrants in the neighbourhood divided by population over age 18 in year t.	Likelihood of migrating for the first time to another destination in Chitwan/another area of Nepal/internationally one year later	An increase in number of years of education by one is correlated with a **51.2 percent*** ** increase in the probability of within-Chitwan Valley migration in year t+1. An increase in the rate of neighbourhood intra-Nepal migration in year t is correlated with a **50.5 percent*** ** increase in the probability of intra-Nepal migration in year t+1. An increase in the rate of neighbourhood international migration in year t is correlated with a **51.1 percent*** ** increase in the probability of international migration in year t+1.
				Number of years of education before migrating	Likelihood of migrating for the first time to another destination in Chitwan/another area of Nepal/internationally one year later	An increase in the rate of neighbourhood within-Chitwan Valley migration in year t is correlated with a **50.2 percent*** ** increase in the probability of within-Chitwan Valley migration, a **52.5 percent*** ** increase in the probability of intra-Nepal migration, and a **50.7 percent*** increase in the probability of international migration.
				Having a salaried job vs. not	Likelihood of migrating for the first time to another destination in Chitwan/another area of Nepal/internationally one year later	Having a salaried job is correlated with a **62.3 percent*** ** increase in the likelihood of within-Chitwan migration, a **59.1 percent**** increase in the likelihood of intra-Nepal migration, and a **40.8 percent*** decrease in the likelihood of international migration.
Brown and Connell (2004)	251 medical providers	**30.7 percent** of the sample population is a current migrant, while an additional **25.5 percent** is a returned migrant.	Logit	Income reported as motivation for migration	Engaging in international migration	Medical practitioners who indicate income is a reason for their current migration status are **38 percentage points*** ** more likely to be current or returned migrants.
				One or more	Engaging in	Medical practitioners who have one or more parents

				parents living abroad	international migration	living abroad are **42.6 percentage points*** ** more likely to be current or returned migrants.
Czaika (2011)	125,000 households, 100,000 migrants	**72.8 percent** of households have a migrant. Of those households, **72.8 percent** have an intra-state migrant, **23.2 percent** have an inter-state migrant, and **3.8 percent** have an international migrant.	Probit	Annual household consumption expenditure	Probability household has an intra-state, inter-state or international migrant.	An increase in annual household consumption by USD 2,250 is correlated with an increase in the likelihood of having an international migrant by **1 percent*** **, having a migrant to another Indian state by **6 percent*** **, and a decrease in the likelihood of having a migrant within the same state by **10 percent*** **.
Gibson and McKenzie (2011)	510 top students from NZ, Tonga, PNG	Approximately **62.1 percent** of top students in the survey sample have ever moved abroad for work or study after secondary school.	Probit with country fixed effects	Risk seeking score (11pt scale) Having studied a foreign language other than English in the final year of high school Having studied biology, chemistry, and physics in the final year of high school	Probability of migrating internationally	All three variables are correlated with an increased likelihood of migrating internationally: A higher risk seeking score results in **2.9 percentage point*** ** increase in probability of having migrated internationally. Studying a foreign language results in a **19.6 percentage points*** ** increase in the likelihood of migration. Studying three science subjects in high school increases the likelihood of migration by **21.3 percentage points*** **.
Gray and Mueller (2012)	1,500 households	Among males in the study sample, **40.9 percent** of moves were out-of-district, **32.4 percent** were for labour. Among females, **62.0 percent** of moves were motivated by marriage.	Multinomial models	Share of households reporting drought	Probability of migration type by distance and reason	A 10 percent increase in the share of households in a community reporting drought in the previous year leads to an **18 percent*** ** increase in the likelihood of males migrating out of the district, a **13 percent increase*** ** in the likelihood of males migrating for labour, and a **10 percent^** decrease in the likelihood of women migrating for marriage.
Gray and Wise (2016)	9,812 Households in Kenya, Uganda, Nigeria,	Sample rate of internal migration (in percent) Kenya: 27.7 Uganda: 28.6	Negative binomial regression	Precipitation	Effects on probability of internal migration and international migration	An increase in precipitation by one unit above 1981-2010 average leads to: Kenya: **22 percent*** increase in the probability of internally migrating.

	Burkina Faso, and Senegal	Nigeria: 35.6 Burkina Faso: 22.7 Senegal: 25.0 Sample rate of International Migration (in percent) Kenya: 26.0 Uganda: 9.7 Nigeria: 17.6 Burkina Faso: 19.9 Senegal: 23.4	Negative Binomial Regression	Temperature	Effects on probability of internal migration and international migration	Nigeria: **29 percent* increase** in the probability of internally migrating; **53 percent^** increase in probability of migrating internationally. Burkina Faso: **45 percent***** decrease in the probability of migrating internationally. An increase in temperature by one unit above 1981-2010 average leads to: Kenya: **45 percent***** decrease in the probability of internally migrating. Uganda: **111 percent**** increase in the probability of internally migrating. Burkina Faso: **51 percent**** decrease in the probability of internally migrating; **81 percent^** decrease in the probability of internationally migrating.
Gubhaju and De Jong (2009)	3,618 households, 3,306 individuals	**16.6 percent** of the population aspired to migrate in the next 12 months, and **26.1 percent** in the next 5 years.	Logistic Regression	Level of educational attainment	Likelihood of expressing aspiration to migrate in the next 12 months / 5 years.	Married females who have attained a post-school qualification are **576 percentˆ** more likely to express the aspiration to migrate in the next 12 months and **3631 percentˆ** more likely to express the aspiration to migrate in the next in the next 5 years than married females who have only completed primary education. While results are insignificant for married males, unmarried males who attained a post-school qualification are **262 percent**** more likely to express the aspiration to migrate in the next 12 months, and **1010 percent^** in the next 5 years than unmarried males who have only completed primary education.
				Marriage status	Likelihood of expressing aspiration to migrate in the next 12 months / 5 years.	Married males are **58 percent^** more likely to express desire to migrate in the next 12 months, and **49 percent***** more likely in the next 5 years than never married males.

						Married females are **66 percent*** ** less likely to express desire to migrate in the next 12 months, and **120 percentˆ** less likely in the next 5 years than never married females.
Heering et al (2004)	893 women, 1,020 men	**5.6 percent** of women and **27.4 percent** of men in the survey sample expressed an aspiration to migrate internationally.	Logistic Regression	Employment in Morocco (country of origin)	Aspiration to migrate internationally	Women who have paid work in Morocco are **298 percent*** ** more likely to express the aspiration to migrate internationally.
				Have a family network abroad	Aspiration to migrate internationally	Males who have family networks abroad are **27 percent*** less likely to express an aspiration to migrate which females with such networks are **86 percent*** more likely to express this aspiration.
				Live in a region where a migration culture exists	Aspiration to migrate internationally	Males who are from regions where a migration culture exists are **73 percent*** ** more likely to express an aspiration to migrate.
Henry et al (2004)	3,911 individuals	**50.4 percent** of respondents undertook some form of migration during the studied period, 1970-1998. **31.3 percent** of males undertook short-term migration (less than or equal to 2 years), whereas **5.2 percent** of females undertook short-term migration.	Multinomial Logistic Regression	Average Rainfall	Probability of first-time migration abroad	Average rainfall above 900mm (compared to 700-899mm) is correlated with a **96 percent** ** increased probability of migration among males and **108 percent**** among females. Males in villages receiving less than the normal 900mm of rainfall are **81 percent** ** (700-899mm of rain), **173 percent*** ** (500-699mm of rain), and **216 percent** ** (200-499mm of rain) more likely to undertake rural-rural migration. Males in villages where the last three years of rainfall were greater than or equal to 95 percent of normal levels are **44 percent**** more likely to migrate internationally, while females are **33 percent+** less likely. Males in villages experiencing drought are **42 percent** ** (85-95 percent of normal rain) and **58 percent*** (less than 85 percent of normal rain) more

						likely to undertake rural-rural migration.
				Level of education	Probability of first-time migration	Having obtained secondary education or higher is associated with a **482 percent*** ** increase in the likelihood of rural-urban migration among males and a **582 percent*** ** increase in the likelihood of rural-urban migration among females.
				Average Rainfall	Probability of first-time migration	Females in villages experiencing less than the normal 900mm per year of rainfall are **63 percent*** ** (700-899mm of rain), **66 percent*** ** (500-699mm of rain), and **60 percent*** (200-499mm of rain) less likely to undertake long-term migration aborad.
Hoti (2009)	4,891 individuals	**8.8 percent** of the sample population was emigrants.	Probit	Level of household income (without remittances)	Probability of being an emigrant	Doubling household income is correlated with a **4 percentage point*** ** decrease in the probability of males, and a **0.06 percentage point*** ** decrease in the probability of females being emigrants.
				Coming from the Gjilan region, with a higher previous immigration rate	Probability of being an emigrant	Living in the Gjilan region is correlated with a **4 percentage point**** increase in the probability of males, and a **0.9 percentage point*** increase in the probability of females being emigrants.
				Having obtained higher education vs. upper-secondary or primary education	Probability of being an emigrant	Females with higher education are **3.3 percentage points*** ** more likely to be emigrants than those with either upper-secondary or less than upper-secondary education.
				Being married vs. not	Probability of being an emigrant	Married males are **3 percentage points**** less likely, and married females are **2.5 percentage points*** ** more likely than their unmarried counterparts to be emigrants.
Koser and Kuschminder (2016)	1,056 individuals	**58 percent** of respondents expressed a desire to migrate onward, **34 percent** to stay in Turkey, and **7 percent** to return to their country of origin.	Multinomial probit	Perception of employment availability		Citing lack of educational/employment opportunities is **not significantly correlated** with a change in probability of expressing a desire to migrate onward compared to security related reasons.
				Employment vs. not	Aspiration to stay in Turkey vs. migrate onward	Being employed in Turkey is correlated with a **9 percentage point*** increase in probability of expressing a desire to stay in Turkey as opposed to migrate

						onward.
Konseiga (2005)	250 households	**27.6 percent** of sample households sent a seasonal migrant to Côte d'Ivoire.	Probit	Level of annual rainfall	Probability of seasonal international migration	Low rainfall in Oudalan, Burkina Faso (400mm) **increases*** ** the probability of seasonal migration to Côte d'Ivoire. Medium yearly rainfall in Seno, Burkina Faso (450mm) **increases** ** the probability of seasonal migration to Côte d'Ivoire. [[NB: Not possible to interpret provided probit coefficients provided in the study as magnitude of effects.]]
				Belonging to an agriculturalist ethnic group	Probability of seasonal international migration	Belonging to an agriculturalist ethnic group is correlated with a **12.9 percentage point** ** increase in the likelihood of undertaking seasonal international migration to Côte d'Ivoire.
Leeves (2009)	918 households	**67 percent** of Fijian households and **40 percent** of Tongan households had at least one member who expressed an aspiration to migrate.	Probit	Receipt of cash remittances vs. not	Expressing aspiration to migrate	Households in Fiji that have received cash remittances in the past year are **17 percentage points**** more likely to have a member expressing an aspiration to migrate, and in Tonga **31 percentage points**** more likely.
Litchfield et al (2015)	1,205 households, 3,330 individuals (between the ages of 16-64)	Current migrants comprised **30.7 percent** of individuals in the sample.	Probit	Value of total land owned (in 10,000s BDT)	Probability of being a migrant	An increase in value of land owned by 10,000 BDT is correlated with a **0.05 percentage point** ** increase in the likelihood of migration by males, and a **0.09 percentage point** ** decrease in the likelihood of migration among females.
Loschmann and Siegel (2013)	2,005 households	**17.4 percent** of households surveyed have a member with concrete plans to migrate abroad.	Probit	Household has savings vs. no savings	Concrete plans for international migration	Households without savings are **8 percentage points**** less likely to have a member with concrete plans to migrate abroad.
				Household cannot rely on help from informal social networks	Concrete plans for international migration	Households that cannot rely on help from informal social networks are **6 percentage points** ** less likely to have concrete plans for international migration.

				Household considers the quality of its social networks low No household member is a member of a community organisation		Households that consider the quality of its social networks to be poor are **7 percentage points*** more likely to have concrete plans for international migration. Households in which no one is a member of a community organisation are **12 percentage points***** less likely to have concrete plans for international migration.
				Education of household head below secondary level vs. above secondary level	Concrete plans for international migration	Households where the household head has below a secondary level of education are **7 percentage points***** less likely to have concrete plans for international migration that households where the head has above a secondary level of education.
				Loss of Social Capital vs. Loss of Human Security vs. Loss in Exchange Freedom vs. Loss in Access	Concrete plans for international migration	Households who experiencing a loss in social capital are **9 percentage points***** less likely to have concrete plans for migration. Households experiencing a loss in access or human security are **4 percentage points*** less likely to have concrete plans for migration.
Loschmann et al (2014)	2,005 households (7,503 individuals)	**93.4 percent** of migrants in the sample used irregular channels.	Probit, Post-2001 data	Unemployed vs. not	Probability of irregular vs regular migration	Individuals unemployed in the country of origin were **9 percentage points***** more likely to have migrated through irregular (as opposed to regular) channels.
				Male vs. Female	Probability of irregular vs regular migration	Males were **13.1 percentage points**** more likely than females to undertake irregular as opposed to regular migration.
Mahendra (2014)	6,282 households	Author's sample purposely selected households who had no migrants before treatment.	Propensity Score Matching	Receipt of unconditional cash transfer	Probability of household having an international migrant relative to the control group	Receipt of unconditional cash transfer has **no significant effect** on the probability that the household has an international migrant relative to the control group. Receipt of unconditional cash transfer is correlated with a **2.1-2.6 percent***** increase in the probability of internal migration.

Massey et al (2009)	1,583 households, 5,271 individuals	Average migration rate in sample not reported.	Ordinary Least Squares, Logistic Regression	Number of key economic services within a 5 minute walk of adult community (Bank, Bus, Employer, Market, Government Programme), divided by 5.	Likelihood of migrating out of Chitwan Valley one year later	An increase in key economic services by a factor of one (increase by 5 economic landmarks) is correlated with a **42.9 percent****** decrease in the probability of leaving Chitwan Valley in the subsequent year.
				Years of Schooling completed	Likelihood of migrating out of Chitwan Valley one year later	Each increase in one year of schooling completed is correlated with a **4.7 percent***** increase in the probability of migrating out of Chitwan Valley.
Massey et al (2010)	1,583 Households	**12 percent** of survey respondents undertook local migration and **29 percent** undertook migration outside the Chitwan Valley during the study period of 1997-1999.	Single multinomial logit model	Time to gather firewood	Monthly rate of out-migration from Chitwan Valley, Nepal	A decrease in the time required to gather firewood by one hour leads to a **10 percent***** increase in migration locally.
				Perceived productivity decline	Monthly rate of out-migration from Chitwan Valley, Nepal	Perceived productivity decline leads to a **31 percent**** increase local migration and a **15 percent**** increase in long-distance migration.
				Share of neighbourhood green space	Monthly rate of out-migration from Chitwan Valley, Nepal	A one percent decrease in the percent of a neighbourhood covered in flora is correlated with a **2.0 percent**** increase in neighbourhood migration rate.
				Household has a network tie	Likelihood of out-migration from Chitwan Valley, Nepal	Households having network ties are **44 percent***** more likely to migrate out of the Chitwan Valley.
				Neighbourhood prevalence of migration	Monthly rate of out-migration from Chitwan Valley, Nepal	A one percent increase in the proportion of migrants in a neighbourhood is correlated with a **275 percent**** increase in the rate of long-distance migration.
				Number of years of schooling	Monthly rate of out-migration from Chitwan Valley, Nepal	An increase in one year of average years of schooling increases the neighbourhood rate of migration by **6 percent*****.

				Currently has a salaried job vs. not	Likelihood of out-migration from Chitwan Valley, Nepal	Individuals with a salaried job are **42 percent*** ** more likely to undertake long-distance moves out of Chitwan Valley.
				Male vs. Female	Likelihood of out-migration from Chitwan Valley, Nepal	Males are **58.7 percent^** more likely to undertake migration than females. The odds ratio suggests that males have a far greater probability of undertaking long-distance moves than females, but this finding is **not statistically significant**.
Mendola (2008)	3,404 farm households	**15.3 percent** of sample households have a temporary internal migrant, **16.5 percent** have a permanent internal migrant, **4.6 percent** have an international migrant.	Multinomial Logit	Size of land owned	Probability household has an internal temporary migrant v. internal permanent migrant v. international migrant	An increase in household land owned by one consumption unit is correlated with a **95.1 percent**** decrease in temporary internal migration, **81.8 percent**** decrease in permanent internal migration, and **724 percent**** increase in international migration.
			Three-stage least squares	Presence of more than one household migrant who had been away at 3 years at time of survey	Probability household has an internal temporary migrant v. internal permanent migrant v. international migrant	The presence of more than one household migrant for at least three years is correlated with a **9.1 percentage point***** increase in the likelihood of having an international migrant, and a **31.2 percentage point***** increase in the likelihood of having a permanent internal migrant.
				Household assesses itself as poor	Probability household has an internal temporary migrant v. internal permanent migrant v. international migrant	Households that assess themselves as poor have a **2.9 percentage point**** increase in the likelihood of temporary internal migration and a **3.7 percentage point***** decrease in the likelihood of international migration.
				Highest education level in the household.	Probability household has an internal temporary migrant v. internal permanent migrant v. international migrant	An increase in the highest level of education in the household by one year is correlated with a **6.1 percentage point***** decrease in the likelihood of temporary internal migration, and a **1.5 percentage point***** increase in the likelihood of international migration.
				Percentage of migrants in the village	Probability household has an internal temporary migrant v. internal permanent	An increase in the rate of temporary internal, permanent internal, and international migrants in the village **increases***** the respective probability of undertaking temporary internal, permanent internal

					migrant v. international migrant	and international migration.
Shrestha (2017)	452 village wards	Author reported international migration rates from Nepal: 1991 – **3.56 percent** 2001 – **3.41 percent** 2011 – **7.43 percent**	Ordinary Least Squares, Fixed Effects	Farm income, estimated by rainfall	Village rate of migration to India	An increase in farm income due to rainfall by 100 USD results in an increased rate of village international migration to India by **2.5 percentage points*****.
				Conflict intensity, deaths per 1,000 people in the village	Village rate of international migration	An increase in one death per 1,000 people increase the village migration rate by **0.8 percentage points**. In urban areas, this increase in conflict intensity is correlated with a **3.1 percentage point**** increase in village migration rate.
Stecklov et al (2005)	12,627 households	Average migration rate in sample not reported.	Difference-in-Difference	Receipt of conditional cash transfer (PROGRESA)	Probability of migration to US relative to the control group	Receipt of conditional cash transfer is correlated with a **0.2 percentage point**** decrease in the likelihood of migration to the United States in the 20 months preceding data collection relative to the control group.
				Receipt of conditional cash transfer (PROGRESA)	Probability of internal migration relative to the control group	Receipt of conditional cash transfer is **not significantly correlated** with a change in the probability of internal migration relative to the control group.
Tegegne and Penker (2016)	553 households	**57.9 percent** of the households surveyed have at least one migrant.	Binary Logistic Regression	Distance to commercial farming	Probability household has a migrant	Living in close proximity to commercial farming is correlated with a **230 percent**** increase in the probability that a household has a migrant. The probability that a household has a short-term migrate increases by **1047 percent***, while the increase in likelihood of having a long-term migrant is **not statistically significant**.
				Number of economic activities undertaken by all household members prior to first migration	Probability household has a migrant	An increase in one household activity is correlated with **19.6 percent**** increase in the probability of the household having a migrant.
				Size of land endowment	Probability household has a migrant	Size of land endowment is not significantly correlated with a change in the probability a household has a

						migrant.
Tirado-Alcaraz (2014)	30,462 individuals	Average migration rate in sample not reported.	Logit	Receipt of conditional cash transfer (PROGRESA)	Probability of labour migration to US relative to the control group	Receipt of conditional cash transfer has **no significant effect** on the probability of having migrated internationally for labour reasons relative to the control group.
				Receipt of conditional cash transfer (PROGRESA)	Probability of internal labour migration relative to the control group	Receipt of conditional cash transfer is correlated with a **16.3 percent**** decrease in the probability of undertaking internal migration.
Williams (2009)	4,825 individuals	**24 percent** of retrospective survey respondents lived away from their residence for six months in a year between 1997-1999.	Logistic Regression	Having attended school in each year of 1997-1999. Highest grade completed in school.	Likelihood of being a migrant.	Not being enrolled in school is associated with a **54 percent**** increase in the likelihood of migration among males and **122**** **percent** increase among females. An increase in educational attainment by one year is correlated with a **7 percent**** increased likelihood of migration among males.
	3,819 individuals	**46 percent** of prospective survey respondents lived away from their residence for at least 15 days in a month between 1997-1999.	Logistic Regression	Having attended school in each year as of 1997. Highest grade completed in school as of 1997.	Likelihood of being a migrant.	Not being enrolled in school is associated with a **28 percent**** increase in the likelihood of migration among males and a **74.5**** **percent** increase among females. An increase in educational attainment by one year is correlated with a **3 percent***** increased likelihood of migration among males, and a **9 percent**** increase among females.
Williams (2013)	3,353 individuals	**63 percent** of the sample population migrated at least once between 1997 and January 2006.	Logistic Regression	Number of Gun Battles per month	Likelihood of being a migrant	An increase in one gun battle per month is correlated with a **9 percent***** increase in the likelihood of migrating.
				Presence of a market or mill within 5 minutes' walk, a farmers' cooperative, or health centre within 10 minutes'	Likelihood of being a migrant	Across four models, an increase in the number of gun battles per month is correlated with increased probability of migration by **16 percent^** (market), **11 percent^** (farmers' cooperative), **20 percent^** (mill), and **16 percent^** (Health centre). However, in the interaction term between number of

				walk		gun battles and the presence of one of these community landmarks within a 5-10 minute walk is correlated with a decrease in the likelihood of migration by **12 percent**** (market), **27 percent***** (farmers' cooperative), **21 percent^** (mill), and **11 percent**** (health centre).
Winters (2009)	4,942 individuals 757 individuals 50+ years old	Average migration rate in sample not reported.	Probit	Conditional Cash Transfer (Red de Protección Social)	Probability of individual migration relative to the control group	Receipt of a conditional cash transfer has no significant effect on the probability of individual migration relative to the control group. Among individuals 50 years or older, receipt of a conditional cash transfer leads to a **1.96 percentage point*** increase in the probability of migration relative to the control group.
Yamuchi and Liu (2012)	3,451 students	**22.11 percent** of students in the sample were migrants.	Logit	Gender (being female)	Likelihood of being a migrant.	Females living in areas undergoing improvement of school quality were **37.5*** percent** more likely to migrate than males in the same districts.
Yang and Choi (2007)	27,881 households	**5.9 percent** of sampled households had an international migrant at the beginning of the study.	OLS, Instrumental Variable	Income, predicted by local rainfall	Probability of international migration	For households who previously had no migrants abroad, a 10 percent increase in income results in a **37.5 percent**** increase in the probability the household will have a migrant abroad.

p-values - +: 0.2; *: 0.1; **:0.05; ***:0.01; ****: 0.005; ^:0.001

APPENDIX E: MATRIX OF REVIEWED ARTICLES

Notes:

* The table below includes 121 studies classified as Moderate- or High-Quality. The score range for High-quality studies is 19-24, and for Moderate-quality studies 11-18. An additional 51 studies classified as "Low-Quality" were not included in the table.

Coding Notes:

Publication Type:

PRJ – Peer Reviewed Journal

INGO Report – Report published by an international NGO

WP* - Working report released by an organisation identified for its focus on migration and development issues

Govt – Report released by a government body

Region:

EAP – East Asia Pacific SSA – Sub-Saharan Africa LAC – Latin America and the Caribbean

SA – South Asia MENA – Middle East and North Africa ECA – Europe and Central Asia

GLOB – Global

Research Method:

Qnt – Quantitative methods Ql – Qualitative methods

Mx – Mixed qualitative and quantitative methods Sec – Secondary review

Author	Title (if needed)	Year Published	Publication Type	Region	Research Method	Quality
Abbott and Silles		2016	PRJ	GLOB	Qnt	L
Abdel-Karim		2016	PRJ	MENA	Qnt	M
Abdulloev, Gang; et al.		2011	WP*	ECA	Qnt	H
Afifi		2011	PRJ	SSA	Ql	L
Ahad		2015	PRJ	SA	Qnt	L
Alscher		2011	PRJ	LAC	Ql	M
Altai Consulting		2016	INGO Report	SSA	Mx	M
Altai Consulting		2009	INGO Report	SA	Mx	M
Anastario, Barrick, et al.		2015	PRJ	LAC	Mx	M
Angelucci		2013	WP*	LAC	Qnt	H

Angelucci	2004	WP*	LAC	Qnt	H
Artuc, Docquier, Özden, et al.	2015	PRJ	GLOB	Qnt	H
Attanapola	2013	PRJ	SA	Ql	M
Baizán and González-Ferrer	2016	PRJ	SSA	Qnt	M
Bardsley and Hugo	2010	PRJ	GLOB	Sec	M
Barrett	2003	WP*	SSA	Ql	M
Bastia	2005	PRJ	LAC	Mx	M
Beine and Parsons	2015	PRJ	GLOB	Qnt	H
Bellak, Leibrecht, et al.	2014	PRJ	ECA	Qnt	M
Bellamy, Hayson, Wake, et al.	2017	WP*	MENA	Ql	M
Belloc	2011	PRJ	SSA	Qnt	H
Berthélemy, Beuran, et al.	2009	PRJ	GLOB	Qnt	H
Bhandari	2004	PRJ	SA	Qnt	M
Black, Kniveton, et al.	2011	PRJ	GLOB	Sec	H
Blacklock, Ward, Heneghan, and Thompason	2014	PRJ	SSA	Sec	H
Bohra and Massey	2009	PRJ	SA	Qnt	H
Borodak and Piracha	2013	WP*	ECA	Qnt	L
Brown and Connell	2004	PRJ	EAP	Qnt	H
Bylander	2014	PRJ	EAP	Ql	M
Bylander	2015	PRJ	EAP	Ql	L
Cai, Feng, Pytliková, et al.	2014	WP*	GLOB	Qnt	L
Carlos	2002	PRJ	EAP	Qnt	L
Castles	2002	WP*	GLOB	Sec	L

Chávez		2012	PRJ	LAC	QI	H
Chikanda		2006	PRJ	SSA	Mx	M
Clemens		2014	WP*	GLOB	Sec	M
Cohen, Ravishankar, and Duberley		2012	PRJ	SA	QI	H
Collyer, Bardak, Jansova, and Kärkkäinen		2013	INGO Report	GLOB	Qnt	H
Connell		2016	PRJ	EAP	Sec	L
Crawley, Düvell, et al.		2016	WP*	GLOB	Mx	M
Cummings, Pacitto, Deletta, and Foresti		2015	WP*	GLOB	Sec	H
Czaika	Internal and international migration as a response to double deprivation: Some evidence from India	2011	WP*	SA	Qnt	H
Czaika	Migration and social fractionalization: Double relative deprivation as a behavioural link	2011	WP*	GLOB	Qnt	M
Czaika and de Haas		2011	WP*	GLOB	Qnt	H
D'Agosto, Solferino, and Tria		2013	PRJ	GLOB	Qnt	L
Danish Refugee Council		2016	INGO Report	SSA	Mx	M
de Haas		2007	PRJ	MENA	Sec	L
de Haas		2012	PRJ	GLOB	Sec	L
Deshingkar and Zeitlyn		2015	PRJ	GLOB	Sec	L
Deshingkar, Godfrey Wood, and Béné		2015	WP*	SSA	QI	M
Dimant, Krieger, and Meierrieks		2013	PRJ	GLOB	Qnt	H
Drabo and Mously Mbaye		2011	WP*	GLOB	Qnt	L
Dustmann and Okatenko		2013	WP*	GLOB	Qnt	H
Echavez, Bagaporo, et al.		2014	INGO Report	SA	QI	M

Fargues	2004	PRJ	MENA	Sec	L
Frouws	2014	INGO Report	SSA	Mx	M
Gautier, Denis, and Locatelli	2016	PRJ	SSA	Sec	M
Gibson and McKenzie	2011	PRJ	EAP	Qnt	H
Gray and Mueller	2012	PRJ	SSA	Qnt	H
Gray and Wise	2016	PRJ	SSA	Qnt	H
Gubert and Nordman	2010	INGO Report	MENA	Sec	L
Gubhaju and De Jong	2009	PRJ	SSA	Mx	H
Gundel	2002	PRJ	SSA	Sec	L
Hagen-Zanker and Himmelstine	2013	PRJ	GLOB	Sec	M
Hagen-Zanker, Mallett, et al.	2014	WP*	SA	Ql	M
Halliday	2010	WP*	LAC	Qnt	L
Hatton and Williamson	2011	PRJ	GLOB	Qnt	H
Hatton and Williamson	2003	PRJ	SSA	Qnt	H
Hatton and Williamson	2005	PRJ	GLOB	Qnt	H
Heering, Van Der Erf, and Van Wissen	2004	PRJ	MENA	Qnt	M
Henry, Schoumaker, and Beauchemin	2004	PRJ	SSA	Qnt	H
Hierro	2016	PRJ	LAC	Sec	L
Hoeffler	2013	INGO Report	GLOB	Qnt	M
Horst	2006	PRJ	SSA	Ql	M
Horst and Nur	2016	PRJ	SSA	Ql	M
Hoti	2009	PRJ	ECA	Qnt	H
Iaria	2011	PRJ	MENA	Ql	M

Ibourk	2016	PRJ	MENA	Qnt	L
IOM	2016	INGO Report	SA	Mx	H
IOM - Climate Change in Kenya	2016	INGO Report	SSA	Sec	L
IOM - Climate Change in Vietnam	2016	INGO Report	EAP	Sec	L
IOM and UNEP	2011	INGO Report	SSA	Sec	L
Jayasuriya, McAuliffe, and Iqbal	2016	Govt	SA	Qnt	H
Jirovsky, Hoffmann, Maier, and Kutalek	2015	PRJ	SSA	Ql	H
Jónsson	2008	WP*	SSA	Ql	M
Khaledur Rahman, Kanti Paul, Curtis, and Schmidlin	2015	PRJ	SA	Ql	H
Khawaja	2003	PRJ	MENA	Qnt	L
Khoo	2014	PRJ	GLOB	Qnt	L
Khoo, McDonald, Voigt-Graf, and Hugo	2007	PRJ	GLOB	Mx	H
Kim and Cohen	2010	PRJ	GLOB	Qnt	M
Konsiega	2005	WP*	SSA	Qnt	M
Koser and Kuschminder	2016	Govt	GLOB	Qnt	H
Koser and Kuschminder	2015	INGO Report	GLOB	Ql	H
Krishnamurthy	2012	PRJ	GLOB	Sec	L
Kritz	2013	PRJ	GLOB	Qnt	H
Kudo	2015	PRJ	SSA	Qnt	H
Leeves	2009	PRJ	EAP	Qnt	H
Lietaert, Derluyn, and Broekaert	2013	PRJ	SA	Ql	H
Lilleør and Van den Broeck	2011	PRJ	GLOB	Sec	H
Litchfield, Mahmood, et al.	2015	WP*	SA	Qnt	M

Loschmann and Siegel	2013	INGO Report	SA	Qnt	H
Loschmann, Kuschminder, and Siegel	2014	Govt	SA	Qnt	M
Lucas	2006	PRJ	SSA	Sec	L
Lukic	2016	PRJ	GLOB	Qnt	L
Mahendra	2014	WP*	EAP	Qnt	H
Mallett, Hagen-Zanker, Majidi, et al.	2017	WP*	SSA	Ql	H
Marchiori, Maystadt, and Schumacher	2012	PRJ	SSA	Qnt	M
Martin, Billah, Siddiqui, et al.	2014	PRJ	SA	Ql	H
Massey, Axinn, and Ghimire	2010	PRJ	SA	Qnt	H
Massey, Williams, Axinn, and Ghimire	2009	PRJ	SA	Qnt	H
Maurel and Tuccio	2016	PRJ	GLOB	Qnt	M
Mayda	2010	PRJ	GLOB	Qnt	M
Mberu, Blessing Uchenna; Pongou, Roland	2016	PRJ	SSA	Sec	L
McAuliffe	2013	Govt	GLOB	Qnt	H
Mendola	2008	PRJ	SA	Qnt	H
Moret, Baglioni, and Efionayi-Mäder	2006	INGO Report	SSA	Mx	H
Moullan	2013	PRJ	GLOB	Qnt	H
Mously Mbaye, Linguère; Zimmermann, Klaus F.	2015	WP*	GLOB	Sec	L
Munteanu	2007	WP*	GLOB	Mx	M
Naudé, Wim	2008	INGO Report	SSA	Qnt	L
Naudé, Wim	2010	PRJ	SSA	Qnt	L
Nyberg-Sørensen, Ninna; Van Hear, Nicholas; Engberg-Pedersen, Poul	2002	PRJ	GLOB	Sec	L
OECD	2017	INGO Report	GLOB	Mx	H

Page and Adams Jr.	2003	WP*	GLOB	Qnt	H
Paul	2005	PRJ	SA	Ql	H
Peri, Docquier, and Ruyssen	2014	PRJ	GLOB	Qnt	H
Pismennaya, Elena A.; Karabulatova, Irina S.; et al.	2015	PRJ	EAP	Qnt	L
Raleigh, Clionadh	2011	PRJ	GLOB	Sec	L
Raleigh, Clionadh; Jordan, Lisa; Salehyan, Idean	2008	INGO Report	GLOB	Sec	L
Reynolds	2006	PRJ	SSA	Ql	M
Rigg, Jonathan	2006	PRJ	EAP	Ql	L
Samuel Hall	2012	INGO Report	SA	Mx	L
Samuel Hall, Norwegian Refugee Council	2014	WP*	SSA	Mx	M
Samuel Hall; Norwegian Refugee Council	2016	WP*	SSA	Ql	L
Schewel	2015	WP*	SSA	Mx	M
Sheikh, Abbas Naqvi, Sheikh, et al.	2012	PRJ	SA	Qnt	H
Shrestha	2017	INGO Report	SA	Qnt	H
Silvey	2006	PRJ	EAP	Ql	M
Sriskandarajah, Dhananjayan	2002	PRJ	SA	Sec	L
Stecklov, Winters, Stampini, and Davis	2005	PRJ	LAC	Qnt	H
Stoll	2010	PRJ	LAC	Ql	M
Strand, Akbari, et al.	2008	INGO Report	SA	Ql	H
Tegegne and Penker	2016	PRJ	SSA	Qnt	H
Teye, Joseph Kofi; Setrana, Mary Boatemaa; Acheampong, Abigail Agyeiwaa	2015	PRJ	SSA	Mx	L
Thieme, Susan	2008	PRJ	GLOB	Sec	L

Thomas	2011	PRJ	GLOB	Qnt	H
Thomas	2016	PRJ	GLOB	Qnt	H
Tilly, Chris	2011	PRJ	GLOB	Qnt	L
Tirado-Alcaraz	2014	PRJ	LAC	Qnt	M
Torneo	2016	PRJ	GLOB	Qnt	M
Tuccio, Michele	2017	PRJ	EAP	Qnt	L
van Dalen, Hendrik P; Groenewald, George; Fokkema, Tineke	2005	PRJ	MENA	Qnt	L
Van Hear, Bakewell, and Long	2012	WP*	GLOB	Sec	M
Wang, Wong, and Granato	2013	PRJ	GLOB	Qnt	M
Warner, Koko; Afifi, Tamer	2014	INGO Report	GLOB	Mx	L
Warner, Koko; et al.	2009	INGO Report	GLOB	Qnt	L
Warziniack, Travis	2013	PRJ	GLOB	Qnt	L
White, Michael J.; Subedi, Inku	2008	WP*	GLOB	Sec	L
Williams	2009	PRJ	SA	Qnt	H
Williams	2013	PRJ	SA	Qnt	M
Winters and Parsons	2014	WP*	GLOB	Sec	H
Winters, Stecklov, and Todd	2009	PRJ	LAC	Qnt	H
Xu and Sylwester	2016	PRJ	GLOB	Qnt	H
Yamauchi and Liu	2012	INGO Report	EAP	Qnt	H
Yang and Choi	2007	PRJ	EAP	Qnt	H
Yen, Platt, Yeoh, and Lam	2015	WP*	EAP	Mx	M
Yen, Platt, Yeoh, et al.	2014	WP*	EAP	Qnt	M
Young and Ansell	2003	PRJ	SSA	Ql	H

Young, Helen	2006	WP*	SSA	QI	L
Young, Osman, et al.	2005	INGO Report	SSA	QI	M
Ziesemer, Thomas	2009	INGO Report	GLOB	Qnt	L
Zimmerman	2011	PRJ	SSA	QI	M

ABOUT THE MIGRATION POLICY INSTITUTE

The Migration Policy Institute is an independent, nonpartisan, nonprofit think tank dedicated to analysis of the movement of people worldwide. Headquartered in Washington, DC and with offices in New York and Brussels, MPI provides analysis, development, and evaluation of migration and refugee policies at the local, national, and international levels. MPI is guided by the philosophy that international migration needs active and intelligent management. When such policies are in place and are responsibly administered, they bring benefits to immigrants and their families, communities of origin and destination, and sending and receiving countries. Through its research and policy work over the past decade, MPI has become one of the most widely recognised and respected resources on migration analysis and policy design worldwide.

For over a decade now, MPI has worked consistently to deepen understanding of the broad impact of international migration on the development prospects of countries of migrant origin, through its programme area, “Migrants, Migration and Development.” MPI interprets the policy implications of research on remittances, and at the same time draws a more comprehensive picture of migration-development linkages, ranging from foreign direct investment by emigrants to the social and political influences of diaspora communities and returning migrants.