MIGNEX

Empirical assessments of the development impacts of migration

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MIGNEX

MIGNEX (Aligning Migration Management and the Migration–Development Nexus) is a five-year research project (2018–2023) with the core ambition of creating new knowledge on migration, development and policy. It is carried out by a consortium of nine partners in Europe, Africa and Asia: the Peace Research Institute Oslo (coordinator), Danube University Krems, University of Ghana, Koç University, Lahore University of Management Sciences, Maastricht University, the Overseas Development Institute, the University of Oxford and Samuel Hall.

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MIGNEX Background Papers

The MIGNEX Background Papers are scientific papers containing the documentation and analyses that underpin the project results. Selected insights from background papers are also presented in non-technical form in other formats, including MIGNEX Policy Briefs and MIGNEX Reports.

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Empirical assessments of the development impacts of migration

Measuring the impact of migration on development implies fundamental and wide-ranging conceptual and methodological considerations. This background paper reviews key concepts and methodological approaches to date and provides suggestions for future research.

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Investigating the development impacts of migration using a holistic, multi-dimensional approach would add value to existing evidence.

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Without experimental data, researchers can include design features such as retrospective data and collection of complementary community-level data to reduce estimation bias due to self-selection.

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Future research can fill an important gap by collecting and analysing data related to the development impacts of involuntary immobility.

Introduction

Assessing the development impacts of migration first of all involves a clarification of the terms 'migration' and 'development'. Defining migration may seem relatively straightforward, but the migration process is complex, and definitions across studies and dataset vary owing to conceptual, political and methodological factors as well as data constraints. At the same time, the definition and operationalisation of 'development' has been widely debated and resulted in several conceptual frameworks (Alkire, 2002; Clark, 2006;

Sen, 1999), but their applications remain rather limited in the empirical migration research.

Consequently, existing empirical studies linking migration and development have adopted different and sometimes contrasting definitions and operationalisation of both the term 'migration' and 'development'. Migration researchers are also faced with numerous methodological challenges when assessing causal impacts of migration on development, the most important of which is endogeneity[1]. The purpose of this background paper is to review conceptual and methodological aspects in assessing the development impacts of migration and recommend best practices and ways forward for future data collection and analytical work.

This paper tackles four main questions:

- How is 'migration' defined, measured and operationalised in migration and development data and studies?

- How is 'development' defined, measured and operationalised in migration and development data and studies?

- What are the main conceptual and methodological considerations when assessing the impact of migration on development?

- What are the implications for future research?

Given the vast empirical literature investigating the impacts of migration on development, this paper focuses on quantitative data sources, analytical methods and concepts, operationalisation of concepts, and methodologies used, while the empirical findings on the development impacts *per se* is beyond the scope of this paper[2]. However, the conceptual discussions on migration and development may also be relevant for migration research using other methodologies and approaches.

This paper starts by examining the conceptualisations and measurement of different aspects of migration. It then moves on to discuss how development has been conceptualised and operationalised in general, and in the migration and development literature. The following section discusses channels through which migration affects development and reviews the challenges and methodologies employed in quantitative empirical assessments of the development impacts of migration. Furthermore, the paper also includes a section that highlights approaches and methodologies adopted by recent, large-scale and multi-country migration projects. The final section concludes and provides some suggestions for future research.

This section reviews the approaches and methodologies adopted by two previous large-scale, multi-country and multi-disciplinary projects with the objective to analyse the linkages between migration and development. A common feature of these studies is that they have use new primary data

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[1] Endogeneity in statistical analysis refers to a situation in which the researcher is unable to estimate a *causal* impact of an explanatory variable on the outcome due to for example migrant self-selection.

[2] For an overview of the empirical findings see, for example, Andersson and Siegel (forthcoming) and Ratha et al. (2011)

collected specifically for the purpose of the project objective. The projects are reviewed based on three main elements (1) selection and operationalisation of migration aspects; (2) selection and operationalisation of developing dimensions; and (3) methodological approach and considerations.

Conceptualising and measuring migration

To assess the development impacts of migration it is first important to understand the different dimensions of migration. This section starts by defining what we mean by migration, and then reviews various aspects of the migration process and discusses how these can be conceptualised and measured.

There is no universally accepted definition for the term 'migrant', and the definitions used in practice vary across different surveys, databases, and organisations. The International Organization for Migration (IOM) defines a migrant as

> An umbrella term, not defined under international law, reflecting the common lay understanding of a person who moves away from his or her place of usual residence, whether within a country or across an international border, temporarily or permanently, and for a variety of reasons. (IOM, 2019)

There have been some diverging views on whether refugees should fall under the category of migrants, or if they should be regarded as a separate category. Organisations such as IOM and the United Nations Department of Economic and Social Affairs (UNDESA) use the *inclusivist* definition of migrants that includes refugees. Other organisations, notably the Office of the United Nations High Commissioner for Refugees Refugee Agency (UNHCR), use the *residualist* definition that sees migrants as people who have moved from their usual place of residence for every reason other than fleeing war or persecution, and thereby do not consider refugees as migrants (Carling, 2017).

The IOM definition is also inclusive of both international and internal migration, as movements can take place across or within state borders.

The different stages of migration movement have sometimes been described as the 'migration cycle', defined by the IOM as "Stages of the migration process encompassing departure, in some cases transit through a State, immigration in the State of destination and return" (IOM, 2019). However, seeing migration as one circle that starts with departure and ends with return has received some criticism for not accurately reflecting the complex patterns of migrant movements (Cassarino, 2004; Koser and Black, 1999). Migration movements often involve repeated movements along different migrant routes and return does not necessarily mark the end of the migration cycle. A better way is to see migration as a process, which encompasses a wide range of movements, and intentions of movements:

"Migration processes refers to the full gamut of migration desires, intentions, attempts and actual migration movements. The term encompasses different

types of migration movements, differentiated with respect to composition, direction, timing, and volume."(Carling, 2019).

The rest of this section will give an overview of how different aspects of the migration process have been conceptualised and measured in available quantitative data sources, and what this implies for future data collections.

Measuring aspirations, failed migration attempts and involuntary immobility

The migration process begins before any movement has taken place, or the migrant has reached the intended destination. It involves aspects such as migration aspirations, failed migration attempts and involuntary immobility. These migration aspects are relatively understudied in the context of the migration-development nexus.

Aspirations

Aspiration is a broad concept, defined as the desires, hopes or ambitions to achieve a certain objective (Carling and Schewel, 2018). There are two main types of aspirations relevant for the migration-development nexus: migration and life aspirations. *Migration aspirations* refers to the desire to emigrate in the future. *Life aspirations* involve more general desires, hopes or ambitions for the future, which may (or may not) affect migration aspirations and decisions through, for example, the wish to establish a professional career. Migration aspirations are closely related to migration intentions and plans. These terms are sometimes seen as separate concepts that can be graded based on, for example, the degree of action taken to realise the migration aspiration (e.g. applying for a visa or a job abroad), or the time frame (e.g. planning to emigrate in the coming year). However, it may be difficult to draw a line for when a migration aspiration becomes an intention or a (concrete) plan to migrate (Carling, 2002). 'Migration aspiration' is here used in a broad sense, incorporating both desires, plans and intentions, while still recognising that there are important differences across the different terms.

The inclusion of questions on migration aspirations in different types of surveys has become more common over time. For example, the Gallup World Poll, covering 157 countries worldwide, includes questions about intentions and preparations for migration. In addition, many household surveys also include questions related to migration aspirations and intentions to emigrate in the future. However, survey questions to capture migration aspirations across surveys differ. Carling and Schewel (2018) identify and discuss different typologies of questions related to migration aspirations in migration surveys to date and find differences across surveys both in terms of theoretical conceptualisation and in how questions are formulated. Differences in how aspirations are conceptualised and measured in surveys make it challenging to compare aspirations across different studies using different data sources, and can also lead to biases and different

outcomes depending on the cultural context in which the surveys are implemented (Carling and Schewel, 2018)[3].

One question that often arises in association with migration aspirations is how well aspirations predict future migration. People may state that they want or plan to emigrate, but this does not automatically imply that they will try to succeed. Studies have, however, shown that measures of migration aspirations are relatively good predictors of actual behaviour (Creighton, 2013; Tjaden et al., 2019).

Aspirations may affect development via changes in behaviour such as investments. Aspiring to migrate in the future may lower the incentives to invest in human or physical capital in the country or place of origin. This dynamic is understudied in the migration literature, with the exception of the impact of migration aspirations on educational aspirations and human capital formation. The aspiration to emigrate in the future may increase expected future returns to education and encourage more education in the country of origin, the so-called 'brain gain' hypothesis (Batista et al., 2012; Beine et al., 2001). However, in a setting with low returns to foreign education in the migration destination country, migration aspirations can instead lower the incentives to attain education in the country of origin (McKenzie and Rapoport, 2011). This is just one channel through which aspirations could influence development. More data and research are, thus, needed to shed further light on the link between migration aspirations and development outcomes.

Failed migration attempts

There is no clear definition of 'failed migration attempts'. Here, we define the term as different circumstances in which an intention or attempt to migrate does not lead to arrival or settlement. The failure may take place pre-migration, in a situation where the prospective migrants (due to different reasons) do not succeed in leaving the place of origin or residence. Failed migration can also take place post-migration, if migrants are unable to reach their final destination and either directly return back to the country of origin, stay in a transit country for longer or shorter periods of time, or if migrants pass away during the migration journey.

Failed migration attempts highlight the fact that not all migration is necessarily contributing to development. Migration often involves a high financial risk, especially if the migration is financed by loans. Failed migration attempts can lead to debt accumulation and negatively affect the wellbeing of the migrant and their family, economically and psychosocially. It is, therefore, important to widen the definition of migration and take the issue of failed migration into account when assessing the development impact of migration.

Survey data often fall short on capturing failed migration attempts, especially if the attempt fails already before the prospective migrant left the place of origin, as questions related to aspirations and migration intentions

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[3] For further discussion on the conceptualisation and measurement of migration aspirations, desires and intentions, see the recently published MIGNEX Background Paper *Measuring migration aspirations and related concepts* (Carling, 2019).

often only refer to the future, and not to the past. Information about failed migration attempts in general, and reasons for the failure in particular, is, hence, not captured in surveys, or in any other migration data sources. Migration attempts that fail along the migration route can in some cases be captured in surveys, particularly if the time spent at the destination is sufficient to classify the person as a migrant (normally at least three months for short-term migrants and 12-months for long-term migrants, see the section on emigration for further discussion). Migrants that do not manage to reach their intended destination may end up in transit, which can be captured in survey and administrative data in the transit residence or in surveys with household members in the place of origin (provided that the interviewed members are aware where the migrant is residing). However, the information captured through the emigration experience may not be enough to be able to separate a failed emigration attempt from a "successful" migration experience. Explicit questions about previous migration attempts and experiences of both current and previous members of the household are required to properly capture the various circumstances that surround failed migration attempts.

Migration, especially international migration, is an expensive undertaking, and failed migration attempts often involve large monetary investments that turn into a loss for the prospective migrants themselves, as well as for their families and societies of origin. This is particularly the case for irregular migration that often takes place with the help of smugglers.[4] Besides the monetary costs, failed attempts may also affect the psychological wellbeing and life aspirations of those trying to emigrate. These effects may, separately or jointly, have an impact on development. Financial constraints due to the financing of a failed migration attempt can lead to a decrease in individual and household economic and social wellbeing and affect poverty levels and future investments in physical and human capital. Psychosocial impacts of failed migration may also directly and indirectly affect development and wellbeing of the household through, for example, negative impacts on health outcomes. Another potential indirect channel includes impacts through aspirations, which is further discussed in the next section related to involuntary immobility.

The literature testing the relationship between failed migration attempts and development outcomes is extremely scarce, which is likely explained by the limited data on migration attempts in current datasets. More data and analysis related to failed migration attempts could thus fill an important gap in the literature linking migration and development.

Involuntary immobility

The concept of involuntary immobility was first introduced by Carling (2002), in the framework of the aspiration/ability model. Inspired by Sen's capability approach to development, de Haas later expanded the model to a aspirations-capabilities framework (de Haas, 2012). Involuntary immobility

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[4] According to the United Nations, migrant smuggling is defined as the procurement, in order to obtain, directly or indirectly, a financial or other material benefit, of the illegal entry of a person into a State Party of which the person is not a national or permanent resident" (UN General Assembly, 2000).

describes a situation in which individuals aspire to migrate but lack the ability (or capability) to do so, owing to, for example, financial constraints and/or lack of legal pathways to emigration. It is thus closely related to the two previous terms, aspirations and failed migration attempts.

Involuntary immobility can affect development via effects on aspirations, which in turn can affect development outcomes such as investments in physical and human capital. Without the capability to move, individuals who find themselves in a place where they do not see much of a future will adjust their aspirations to fit their reality. This situation may in turn impede forward-looking, wellbeing-enhancing behaviours such as investments in higher education or other long-term investments. Involuntary immobility would in this case lead to negative development outcomes not only at the individual and household level, but also at community level where aspiration traps prevent broader economic and social change (Czaika and Vothknecht, 2014).

Like in the case of failed migration attempts, empirical literature investigating the impacts of involuntary immobility is lacking. This opens the possibility to measure a relatively unexplored channel through which migration can affect development.

Measuring migration stocks and flows

Migration movements incorporate emigration, immigration and transit migration. The minimum requirement for carrying out analysis on the development impacts of migration is to have some measure of migration movement (or a migration outcome such as remittances). Ideally, the data would capture several migration measures and at least some basic demographic and socio-economic information related to the migrant (such as age, education, gender).

At a first glance, defining migrants and related concepts may seem relatively straight forward. However, there are a number of challenges when collecting migration data, and the definitions often differ across surveys and studies.

Migration data

Migration data can, in general, be obtained from three main sources:

- Population census
- Administrative data
- Sample surveys

The first two sources are usually collected by national statistical offices. The national data can then be compiled and aggregated to international level by international organisations or research initiatives. Ideally, this data should include both migration *stocks* (accumulated number of migrants in the country) and *flows* (the number of migrants entering or leaving a given country during a given period of time).

National statistical offices collect and compile data on migrant stocks through different sources, such as census data, population registries or administrative data. Aggregate data on migrant stocks at both international

and national level are compiled by the UN Statistics Division (UNSD). Other international organisations, such as the Organisation for Economic Cooperation and Development (OECD), also collect migration stock data from its member countries.

Migration survey data, on the other hand, can either be collected through explicit migration surveys, or by adding a migration module to existing surveys such as labour force surveys. Migrants can be captured by the means of including in the household roster not only current household members but all individuals who have been members of the household at any point in the time in the past. An alternative to this approach is to list all current members plus all sons and daughters regardless of where they live. This methodology has been applied to capture internal migration in surveys in China and Mexico (Carletto and de Brauw, n.d.). Fertility modules in surveys can also be used to collect migration information of all sons and daughters of the female members of the household not captured in the household roster. A drawback using this method is that it will not capture children of women who passed away (Ibid.).

UNDESA provides a global estimate of the stock of international migrants by compiling international migrant stocks based on country of birth. If the country of birth is not available in the data, the migration status is determined by country of citizenship. The use of country of birth vs. citizenship comes with different advantage and disadvantages. While citizenship status data has the advantage of being widely available across countries, the drawback of using this measure is that citizenship can change over time and people can hold citizenship of more than one country, or be stateless and lack citizenship. The advantage of using country of birth to define a migrant is that it does not change over time as long as borders stays the same and constitute an objective measure. However, in a context where borders change over time, the use of country of birth may misclassify people as foreign born if they have moved within a country that later experienced a split or change in borders. Given these challenges, the UN recommends that countries collect information on country of citizenship and country of birth (Global Migration Group, 2017). It should, however, be noted that collecting data on citizenship can be highly politicised in certain contexts, which poses additional challenges in data collection.

Besides migration stocks, data on *migrant flows* is very useful when assessing, for example the development consequences of migration. However, measuring flows using census or administrative data is more demanding than measuring stocks, as it requires well-functioning administrative record systems and relatively frequent data collection intervals to accurately capture flow data (Global Migration Group, 2017). National statistics on migration flows are based on different definitions and data collection methodologies. Survey data are better at capturing flows, as it gives more room to include retrospective questions about migration history such as time since migration (or return), the number of migration spells, etc.

Another important distinction is *duration of stay* in the country of destination. Migration can be separated into *short term* (temporary) and *long-term* (permanent) migration. The United Nations uses a threshold of 12 months to define a long-term migrant, and three months for short-term

migration. The duration criterion of 12 months for long-term migration is standard for national data collection systems, while the definition of short-term migration varies across countries (usually either three, six or 12 months), which complicates international comparisons across countries (Global Migration Group, 2017). Migration duration may have important implications for impacts on development. For example, remittance flows may vary with the time the migrant has spent abroad. A typical hypothesis is that remittances decline over time, which would imply that the development impact of migration is also likely to be lower for permanent migration compared to temporary migration, when looking specifically at financial remittances. Empirical studies investigating the 'remittance-decay' hypothesis have shown mixed results (Brown, 1998; Hunte, 2004; Makina and Masenge, 2015). More recent migrants may also have more frequent interactions with the family in the place of origin, which could also have implications for the transfer of knowledge, ideas and norms (so-called 'social remittances', which are discussed further in a later section). On the other hand, migrants that have just arrived at the country or place of destination may have not yet had the time to start sending (financial or social) remittances. The relationship between migration duration and level of impact on development is, therefore, likely to follow an inverted u-shape over time.

Data can also collect information on *place and/or country of residence* of the migrant. In survey data, this is often done by asking household members where members who left the household currently reside through questions about country, city or both. However, household members may have imperfect knowledge of the exact location of the migrant. Some surveys also include questions about countries that the migrant has passed through or resided in on the way to the current place of residence to capture more details about the migration experience.

Information about the *reason for migration* is often collected in migration surveys. This information may be more relevant to analysis of causes of migration rather than consequence. However, the reason for migrating may influence the development impact. For example, someone migrating for education abroad may be less likely to send remittances compared to a labour migrant. Knowing more about the purpose of the migration can also directly provide information about expected development impacts, if migration was motivated by, for example, a wish to fund educational or health expenditures of members in the household.

Finally, one might also be interested in knowing the *legal status* of the migrant. Questions related to the migrant being undocumented may be sensitive, although it is less of a problem in surveys conducted in countries of origin than in surveys with migrants in destination countries. If the legal status is sensitive in the context where the study is being conducted, instead of direct question on the status of the migrant, household members can be asked about the documents that the migrant possessed at the time of departure, giving a list of options of different documents that are required when migrating through a legal channel. However, this would not capture the case when someone migrated legally but, for example, overstayed, or the someone migrated without the documents but obtained them in the country of destination.

When it comes to data for migration and development analysis, survey data has several advantages over administrative and census data. Firstly, more information about the socio-economic characteristics and migration experiences can be collected using survey data. Survey data also allows for oversampling of individuals and households with migration experience. Migration, and especially recent migration spells that may be the most interesting migration to capture for analysis of the consequences of migration, is still a relatively rare phenomenon. Few countries have net annual international emigration rates above 2% of the population (Global Migration Group, 2017). A survey of 2000 households would in this case only generate a sample of about 40 households with a migrant. Oversampling would help generate a larger number of households with migration experience in the sample. On the other hand, the disadvantage with survey data is that it is more limited in its geographical scope, and often not nationally representative. National coverage is desirable for most surveys, but as migrants tend to be concentrated in particular regions, selecting a random sample may not lead to efficient data collection.

Transit migration data

One sub-category of migration is transit migration. Transit migration refers to the passage of migrants through countries other than the intended destination. These passages can sometimes be prolonged. From a development impact perspective, it is useful to collect information on transit migration as it may have implications for the ability of the migrant to engage in economic activities, especially during shorter transit periods, to send remittances, etc. Transit migration may instead imply a cost for the household if the migrant is in need of more financing to continue the journey, or perhaps required to pay a ransom fee to escape from detention/kidnapping, which has been the case for many migrants in transit in, for example, Libya.

Collecting reliable information on transit migration is challenging for several reasons. Firstly, defining the end and beginning of a transit migration period requires accurate data on arrival and departure across origin, destination and transit countries. In situations of extended transit migration, it may be difficult to judge when a migrant is no longer in transit. Intentions can change on the way, and what was initially meant to be a transit country can become the final destination. The very idea of transit migration has also been criticised, as it is founded in assumptions about migrants' intentions of onward movement, which is uncertain. Most countries of transit are also countries of immigration and emigration, and it is often difficult to make a distinction between transit migration and other types of migration flows. In migration survey data, migration destination is often obtained by means of proxy from household members in the country (or place) of origin. This may pose an additional challenge because household members may not be aware of the exact location of the migrant, or the intended final destination country of the migrant.

To capture transit migration in surveys, migrants (or their families if the survey is collecting data in the country of origin) can be asked questions about their intended final destination at emigration, stays in countries on the

way to the destination country, and intentions about onward movement in the future.

Measuring return migration

Migrants residing abroad may eventually either choose to stay in the country of destination or return to the country of origin, on a permanent or temporary basis. Return involves the act or process of going back (voluntary or involuntary) to the country or point of departure. This could take place within national borders in the context of Internally Displaced Persons (IDPs), or across borders when people return from countries of destination or transit.

Return migration can be divided into two categories: *voluntary return* and *forced return*. This distinction can be analytically problematic, but it is useful when determining who is in charge of collecting data. The IOM collects data related to its assisted voluntary return and reintegration programmes, while national statistical offices, border protection and immigration law enforcement agencies collect collects on forced return. However, conceptually the terms *voluntary* and *forced* are less clear (Erdal and Oeppen, 2018).

A substantial part of return migration is not recorded, especially not voluntary departures. There are several gaps in national data covering return migration, and existing data are often scattered across different data sources and not always complete or publicly available. As for survey data, return migration is difficult to capture due to several reasons. It is, for example, not easy to distinguish between return migrants and seasonal migrants who regularly depart and return to the place of origin. In other cases, return migrants may have returned with the intention to re-migrate again, but without realising the re-migration plans. The opposite case might also hold, e.g. migrants who return with the intention to stay end up re-migrating. Thus, having the intention of re-migrating (or return permanently) does not mean that all returnees will leave again (or stay). Some surveys, therefore, apply a threshold for the minimum number of months a return migrant has been back in the country of origin (Carletto and de Brauw, n.d.). A threshold of 12 months would exclude seasonal migrants that return and re-migrate several times over the year. However, it would not solve problems of mismatches between intentions and realised migration, which poses a challenge for data collection that covers a limited time period.

There is also a gap in terms of post-return data, including measures of reintegration. Several recent initiatives are trying to address these gaps, especially when it comes to monitoring and measuring the reintegration of return migrants in the country of origin (see for example Koser and Kuschminder, 2015).

Measuring remittances

Transnational practices stemming from migration, such as remittances and diaspora engagement, also play an important role in the migration-development nexus. The primary data source for national remittances is

Balance of Payment (BOP) statistics, estimated by national central banks and complied by the International Monetary Fund (IMF). According to the latest edition of the IMP Balance of Payments and International Investment Position Manual, personal remittances are composed of two main components: '*compensation of employees*' and '*personal transfers*'. There is also a third item '*capital transfers between households*', but few countries report data on this item. '*Personal transfers*' are defined as all current transfers in cash or in-kind made or received by resident households to or from non-resident households (Global Migration Group, 2017). Despite efforts to harmonise data collection methods and definitions across countries, there is still significant heterogeneity in the collection of remittance data across countries, and consequently heterogeneity in the quality of data (Irving et al., 2010). Some central banks do not adequately capture remittances from all sources, such as money transfer operators, post offices and mobile money transfers. Furthermore, countries do not always follow the guidelines from the IMF on how to classify the different categories of remittances, and not all countries report both inflow and outflow of remittances to the IMF. Another challenge includes informal remittances[5], which are difficult to capture in official statistics.

Apart from remittances obtained from BOP, remittances data can also be obtained from household surveys. Remittances are often measured over a certain period, typically the 12 months prior to the survey. The advantage of household surveys compared to BOP data is that more detailed questions about the nature of both the migrant and the remittance flows can be collected, and they record both formal and informal remittances (Clemens and McKenzie, 2018). However, the drawbacks of using survey data are that surveys, as discussed above, are not always nationally representative (and national surveys may contain few remittance-receiving households), they may be subject to recall bias (especially if households tend to pool their resources), and remittances can be highly volatile within a year so the timing of the data collection may influence the numbers obtained (Fajnzylber et al., 2008). Households may also be misreport remittance information (Clemens and McKenzie, 2018). Remittances through in-kind transfers[6] can also be collected, usually by including questions on the type of goods and the estimated value in the 12 months prior to the survey.

Remittances obtained from BOP has been shown to be about 75% higher (Fajnzylber et al., 2008), which may indicate a problem of underreporting of remittances in household surveys. It is, however, difficult to establish which source provides more reliable remittance data, and both BOP and household data are likely to underreport true remittances due to informal remittance channels and household's unwillingness to reveal the true amounts. If the amount of remittances is important for the analysis, a way to enhance quality can be to include questions both on regularity, average amounts and total amounts over 12 months. Substantial discrepancy in the total amounts reported by the household and the calculated total amounts adding up

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[5] Informal remittances include remittances transferred through private, undocumented channels.

[6] In-kind remittances refer to remittances in the form of jewellery, cloths and other consumer goods.

number of remittances and average amounts would indicate that there is some form of bias, either from recall or intentional.[7]

Besides money, migrants can transmit ideas, behaviour, identities and values to their countries of origin. These are known as *social remittances* (Levitt, 1998). Social remittances do not only travel in one direction, but are circular and can also be transmitted from the country of origin to the destination country (Levitt and Lamba-Nieves, 2011). Given the nature of these transfers, it is not possible to explicitly measures social remittances in the same way as financial and in-kind remittances. Quantitative studies analysing the link between social remittances and outcomes in the country or place of residence have instead used aggregate data on the share of migrant stocks or flows as a proxy for social remittances, when analysing outcomes such as electoral results (Docquier et al., 2016), quality of institutions (Li et al., 2017) and level of democracy (Spilimbergo, 2009). Similar analysis could be carried out at the household level by, for example, comparing attitudes and norms of members before and after migration of a member, or across household with and without migrants. Ideally, one would analyse a matched sample of migrants in destination countries and family members in countries of origin to understand social remittance dynamics. In order to enhance the measure of social remittances in surveys limited to countries of origin, explicit questions on how frequently migrants stay in touch with family and friends in the country or place of origin could be included, as social remittances are more likely to be transferred in a context of frequent interaction between the migrant and the household members.

Implications for future data collection

The discussion in this section highlights some implications for the operationalisation and collection of migration variables in future migration surveys.

First of all, the section identified a gap in data on failed migration attempts and involuntary immobility. Such data are important for analysis on the development consequences of migration aspirations that have never been realised. Measuring failed attempts and involuntary immobility is however not straightforward, and have not been operationalised in quantitative surveys to date. Ideally, one would want to capture this type of data by following individuals over time, to observe aspirations to move and ability to move. This is, however, often not feasible due to costs and time constraints. If the alternative is cross-sectional survey data, measures could instead be obtained by asking household members a series of questions about previous plans and attempts to migrate. As discussed, a failed attempt could be defined as one of two cases:

1. Individual aspires to migrate but never managed to leave the household

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[7] If data is collected is carried out using electronic devices, the survey could be programmed to flag such discrepancy. With paper-based surveys, this would essentially be a way to check data quality post-collection.

2.   Individual left the household but never reached the intended final
destination (or had a very short stay in the destination), and returned to
the household either due to expulsion or voluntarily

In the first case, a household survey could either include direct questions of
whether the person has tried to migrate but interrupted the plans before
migration, or after a short period of time abroad.

An alternative for case 1 would be to divide the question in two, and use
already tested and established questions related to migration plans and
preparations, for example, the Gallup survey questions (here adapted to past
tense): "*In the past five years, did you ever plan to move to another country, or
not*?" and if 'yes': "*Did you make any preparation for this move*?". [8]

It will also be important to include a question on reason for not managing to
migrate, to separate those who changed their mind due to personal reasons
from those who did not migrate due to some (perceived) barrier. Barriers
could for example include: (1) economic (could not afford to emigrate); (2)
social (not socially accepted to migrate, or pressure to stay home to help out
in the household), policy (immigration policies to strict), or personal (too risk
averse to migrate, too old).

As for the second case (failed migration along the migration route), if the
survey tool contains a roster that identifies the current emigrants in the
households[9] , an additional roster question could be added to identify shorter
migration spells (for example, less than 3 months). This would identify
members with experience of failed migration attempts already at the
beginning of the survey, and would allow follow-up questions related to
reasons for returning. It is advised to define failed migration attempts of
those who left within a time span that do not overlap with the time reference
for emigrants to avoid that someone identified as having experienced a
failed migration attempt is also defined as a return migrant. Finally, in
addition to these questions, questions on current migration aspirations
should also be added to the sequence, to single out those who are not
planning to emigrate again, as they might not see themselves as 'immobile'.

Based on the definitions of a 'migrant' above, emigrants can be identified
based on five criteria in survey data: (1) place of birth; (2) change of
residence; (3) household membership; (4) duration of stay away from the
household; (5) reference period for migration (i.e. period covered by the
survey in terms of past migration spells). The cut-off time for the last two
characteristics should be based on the purpose of the study, but as a general
rule a shorter time span (3 or 6 months) is preferred for the time away from
the household if the study wants to take into account all types of migration,
including seasonal and transit. A definition of that is more inclusive will
costs a little bit more in terms of time for data collection, but will give more
flexibility to define different migrant samples in the analysis. As for the
reference period, data on relatively recent migration may be preferred for

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[8] For a more detailed discussion on the questions related to migration intentions, see the
recently published MIGNEX Background Paper *Measuring migration aspirations and related
concepts* (Carling, 2019).
[9] The roster would typically include screening questions that determinants whether a person is
a current migrant, return migrants etc.

development impacts as one can expect the development consequences to be more noticeable in the first few years. Focusing on recent migration can also be an advantage if the aim is to also collect retrospective data on the socio-economic situation just before or at the time of migration, which can enhance the analysis of migration consequence (as discussed further in the later sections of the paper).

In some cases, it might be worth complementing country of birth data with citizenship data (including dual citizenship) to determine migration status. Especially in border areas or in contexts with an intense migration corridor with a lot of bi-lateral flows.

The advantage of survey data over other types of data is also that it can collect detailed data about other migration aspects, such as remittances and return migration. This type of data can considerably enhance analysis of the impact of migration on development.

Finally, a word on sampling. Depending on the context and purpose of the study, researchers should consider oversampling migrant groups, as very few countries and areas have migration rates that are sufficiently high to generate a migrant sample that generates more than 10% of the total sample. In fact, most countries do not have migrant stocks above 2-3% of the population, and migrant flows in recent years is likely to be even lower.

Conceptualizing and measuring development

Defining and measuring development has been a topic of discussion for decades. Traditionally, development was closely linked with income and other economic development outcomes. The focus has, however, more and more shifted towards broader definitions that incorporate multidimensional measures with a focus on expanding people's own capabilities and choices, and aiming for development that is both sustainable and inclusive (Barder, 2012). This section reviews the evolution of development definitions over time, and discusses development outcomes in the migration and development literature.

Defining and operationalizing development

A contemporary definition of development could be summarized in three main elements (Spilimbergo, 2009):

— *Development is 'a process of enlarging people's choices'*. This basic description was the foundation for the first Human Development Report (UNDP 1990), drawing upon the work of Amartya Sen (1989), who defined development as 'expansion of capabilities'. The core idea is that different people value different outcomes, and that choice itself is fundamental.

— *Development is a multi-dimensional concept*. The original notion of human development focused on (1) leading a long and healthy life, (2) being educated and (3) enjoying a decent standard of living. Other

relevant dimensions include democratic participation and security from violence, as reflected, for instance, in the broad scope of the SDGs (UNGA, 2015)

— *Development is both individual and systemic*. The current well-being of individuals matters, but so does the distribution of well-being and the capacity of economic, political and social systems to provide the circumstances for that well-being on a sustainable, long-term basis (Barder, 2012).

This broad definition reflects the shift over time in how development is defined, from mainly interpreting development in economic terms to a focus on human development in recent decades. Traditional welfare economics have generally focused on incomes (economic or monetary development) as the main measure of development and wellbeing. However, this view of development has largely been revised, much thanks to the work of to the Nobel prize-winning economist Amartya Sen. Sen showed that poverty is highly linked to a range of depravations in health, education and living standards that cannot be captured by income measures (Sen, 1989). Sen later developed his arguments to view development as an integrated process of expansion of substantive freedoms that connect with one another, and where the expansion in freedoms constitute both the ends and the means of development (Sen, 1999). Ultimately, development is about changes in choices, capabilities and freedom, and the distribution of these improvements (Sen, 1999). Expanding substantive freedoms can, thus, create a self-reinforcing process that allows people to live lives that they value (Chappell and Sriskandarajah, 2007).

Sen's capability approach has over time become widely accepted, influential and applied in the development literature in general (Barder, 2012), as well as in the development of a conceptual framework of migration and development interactions (Sen, 1999). The framework has been praised for being flexible enough for researchers to develop and operationalize it in different ways (Alkire, 2002). While Sen highlighted a number of examples of intrinsically valuable capabilities, he does not provide a pre-set list of capabilities for the operationalization of the framework. Instead, he argues that the selection and weighting should be based on personal value judgement and depends on the purpose of the application (Clark, 2006). If the purpose is to apply the framework to a poverty assessment it may for example require a smaller sub-set of capability measures, while an evaluation of human development or well-being requires the inclusion of a longer and more diverse set of capabilities (Ibid.; Sen, 1993). Sen also recognized that the framework may not be sufficient to provide a complete theory of justice or development. Other values, such as personal liberty, economic growth and efficiency may also need to be considered (Clark, 2006).

While some appreciate the flexibility that Sen's framework offers in the selection of capabilities, the lack of a defined list of capabilities is also one of the main criticisms of the approach. Others have questioned to what extent it is possible to operationalise the framework and use it for inter-personal comparison, given that there might be different views on the valuation and relative weights of different capabilities (Clark, 2006). There have been

several attempts to develop Sen's work and complement the framework with a set-list of central capabilities. Nussbaum draws on the work of Sen to develop a defined list of "central human capabilities". The list included ten central human functional capabilities: life; bodily health, bodily integrity, senses, imagination and thought, emotions, practical reason, affiliation, other species, play and political and material control over one's environment (Nussbaum, 2001). The capabilities approach has also inspired the development of other frameworks with the aim to create multidimensional development indicators, notably the UN Human Development Index (HDI) and the Multidimensional Poverty Index (MPI). The Human Development Index was developed by the United Nations, and builds on the notion that human development is a process of enlarging people's choices. The original notion of human development focused on three key dimensions: (1) longevity; (2) knowledge; and (3) decent living standards (UNDP, 1999). Each dimension is broken down into multiple indicators, and the HDI is a summary measure of average achievement in each of the key dimensions. Over time, relevant dimensions like democratic participation and security from violence have broadened the span of human development, which also follows from the Sustainable Development Goals (SDGs) (UNGA, 2015). While the HDI is only available as an aggregate country measure of human development, the Multidimensional Poverty Index was developed as a way to measure the combination of deprivations at household level. The MPI can be applied using micro level data, and is based on ten indicators to measure the percentage of households that experience overlapping deprivations in the three main HDI dimensions: education; health; and living conditions (Alkire et al., 2017). Out of the ten components of the index, two are related to educational achievements, two represent health outcomes, and six capture 'living standards' such as access to services and proxies for household wealth. Both the HDI and MPI can be measured and compared over time. A number of countries have also implemented national or local MPIs as official poverty measures (MPPN, 2019).

Another framework that aims to go beyond conventional measures of development is the "sustainable livelihood approach". The concept was first introduced by the Brundtland Commission on Environment and Development, and presented a way of linking socioeconomic and ecological considerations in a cohesive and policy-relevant structure (Krantz, 2001). The Brundtland Commissions report "Our common Future", (WCED, 1987) made the linkage between economic development and environmental stability and included a definition of sustainability that has been commonly endorsed globally. The report talks about sustainable development as "development that meets the need of the present without compromising the ability of future generations to meet their own needs" (Ibid.). In other words, the concept of sustainable development means to maintain economic advancement and progress while protecting long-term environmental values. In this sense, it provides a framework for the integration of environmental policies and development strategies.

The 1992 United Nations Conference on Environment and Development expanded the concept of sustainable livelihoods and advocated for the achievement of sustainable livelihoods as a broad goal for poverty eradication (Krantz, 2001). The approach focuses on helping poor people achieve lasting improvements linked to their own livelihood objectives. In

order to do so, two activities are of particular importance: (1) improve access to livelihood assets; and (2) make sure these assets are sustainable. Since then, much effort have been made in refining the concept both analytically and operationally, by researchers and national aid agencies, in particularly by the Institute for Development Studies (IDS) at the University of Sussex and the British Department for International Development (DFID). The approach organises the factors that constrain and enhance livelihood opportunities, and shows how they are inter-related. A central notion is that households have different access to livelihood *assets*, which can be expanded but this often includes trade-offs. The livelihood assets are multidimensional and can be categorized into:

- Human capital
- Social capital
- Physical capital
- Financial capital
- Natural capital

The livelihood approach has been adopted by several aid agencies as a strategy towards poverty alleviation.

The capabilities approach and the livelihood approach are to a large extent complementary and overlapping. However, Chappell and Sriskandarajah (2007) points out that there is one important difference: while the capabilities approach is concerned with expanding all capabilities in a person's life, the sustainable livelihood approach focuses more on expanding the ability to achieve certain objectives.

Finally, one of the more recent development frameworks is the United Nation's Sustainable Development Agenda, which defines three core elements that are crucial for sustainable development:

1. Economic growth
2. Social inclusion
3. Environmental protection

The elements are considered interconnected and crucial for the well-being of individuals as well as societies. The Sustainable Development Agenda has been broken down into 17 goals, with a sub-set of indicators (targets) as well as a global indicator framework to assess the achievement of the targets, currently including 232 indicators.

While these different frameworks and subsequent indices such as the HDI and MPI have been widely accepted and adapted by researchers and international and national intuitions, they have also been subject to some criticism. A main general criticism is the arbitrary choices between capabilities or indictors in the different frameworks, and how these indicators are weighted and interrelate. The usefulness of adding up multiple dimensions of poverty into a single composite index has also been criticised (Ravallion, 2011).

The third element of the development definition introduced this section also highlights development as being both individual and systemic. The well-being of the individual matters, but so does the distribution of well-being

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and the capacity of economic, political, and social systems to provide the circumstances for that well-being on a long-term basis (Barder, 2012). The approaches discussed in this section recognise that the objective of development is an expansion of people's capabilities, livelihoods or other values rather than economic growth. Economic growth may be a necessary condition to achieve the objectives, but it is not necessarily a sufficient one. Public actions through, for example, welfare programmes to support capabilities and livelihoods and tackle capability failure are also important for development (Clark, 2006).
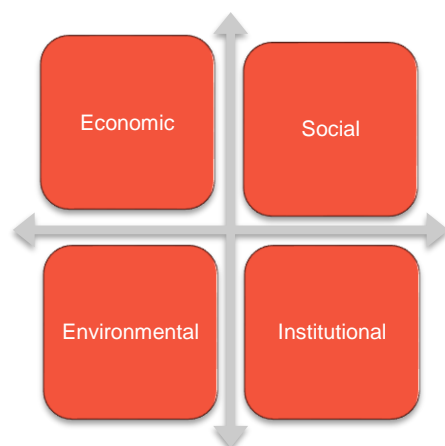
Operationalizing development in migration research

In the same way as the definition of development has broadened and expanded over the past decades, the definition of development in the migration literature has also developed and slightly shifted focus. Following the expansion of development definitions beyond income-maximizing measures, there is now growing empirical evidence on the consequences of migration on a broad range of development outcomes.

The introduction of development concepts such as *capabilities* and *livelihood*s in relation to migration research was led by de Haas (de Haas, 2012, 2010). De Haas advocates for a broadening of the development concept towards Sen's capabilities perspective, to enable migration researchers to "go beyond economic interpretations or a narrow focus on labour migration and to perceive migration within a broader framework of (economic, social or political) opportunity rather than income differentials" (de Haas, 2010). This also has implications for how development is viewed and operationalised in the migration research, and more precisely what constitutes "productive investments". Empirical findings show that migrant households often invest in daily needs and consumption goods, such as food and housing improvements. Such investments have in turn not always seen as "productive", e.g. to lead to long-term development, by those using a narrower definition of development. Applying a broader definition of development, expenditures should be seen as development as long as they enhance people's wellbeing and capabilities (de Haas, 2010). Furthermore, de Haas also points out the role of the state to unleash the development potential in the country of origin. The development potential of migration is determined by migrants' cumulative capabilities and the realisation of these potentials will ultimately be determined by the conditions in the country of origin 04/10/2019 15:47:00

Taking development outcomes as the starting point, the migration and development literature can broadly be divided into four main dimensions of development: (1) economic; (2) social; (3) environmental; and (4) institutional[10] (Figure 1) (Andersson and Siegel, forthcoming)

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[10] It is important to note that some of the dimensions overlap, and measures such as education outcomes could belong to both economic and social development.

Figure 1. Different dimensions of development in the migration and development literature

Source: Andersson and Siegel, forthcoming

Examples from the literature that have been used to operationalise how migration affects different development outcomes are shown in Figure 2 (Figure 2. The development outcomes listed in Figure 2 do not represent an exhaustive list of possible development effects and outcomes under each dimension, but rather provide an overview of the broad set of outcomes used in the empirical literature to assess development impacts of migration to date.

Economic	Social
− Growth − Poverty − Inequality − Investment − Consumption − Savings − Assets − Employment − Wages/income − Entrepreneurship − Trade − FDI	− Health − Education − Social protection − Social cohesion − Gender equality/roles − Well-being − Happiness − Life satisfaction
Institutional	**Environmental**
− Corruption − Political participation − Knowledge transfers − Networks (scientific, professional) − Democratization	− Urbanisation − Water and sanitation − Energy − Climate change adaptation and resilience

Figure 2. Examples of operationalisation of development in the quantitative migration literature, by development dimension

Source: Andersson and Siegel, forthcoming

The list includes a wide variety of development outcomes, from traditional economic outcomes such as growth and investments, to political participation and subjective measures of happiness and wellbeing. The empirical literature is diverse in its use of data sources, level of analysis (macro and micro), and geographical coverage.

A recent review of the literature showed that most of the development outcomes analysed in empirical quantitative studies are linked to either economic or social development outcomes, while there is relative scarcity in studies analysing institutional and environmental development outcomes (Andersson and Siegel, forthcoming). Hence, despite an emerging literature focusing on a broader range of development processes, such as transfers of technology, cultural norms and political ideas, the empirical literature to date is still biased towards economic and social (mainly education and health) development outcomes.

To discuss the operationalisation of the various outcomes individually is beyond the scope of this paper. It should however be noted that development outcomes are operationalised in different ways. For example, the analysis of social development outcomes such as education and health can be defined as impacts on access (e.g. school enrolment, visit to health clinics, access to health insurance), on outcomes (e.g. educational attainment, school grade, graduation, current health status), on quality (e.g. private/public school enrolment, hospital vs. health clinic) and so on. The operationalisation is based on data availability, contextual factors, and/or other factors related to the nature of the study.

One thing that most of the quantitative empirical migration literature has in common is that studies tend to look at one or a limited number of development outcomes at a time (Andersson and Siegel, forthcoming). Most studies focus on only one or a few of the development outcomes under one (and more seldom) two different development dimensions (Cebotari et al., 2017; Vanore et al., 2015). There have been some efforts in integrating different types of multidimensional measures of development in analysis of the consequences of migration. The United Nations Development Programme (UNDP) has for example published reports on the human development and mobility (UNDP, 2009). There are also a series of recent papers that have applied the MPI index to investigate the link between migration and multidimensional poverty, in order to take into account the multiple ways in which migration could affect poverty (Gassmann et al., 2018; Kuschminder et al., 2018; Siegel and Waidler, 2012; Vanore et al., 2017; Waidler et al., 2018).

A recommendation for future migration and development surveys would be to aim to capture different dimensions and indicators of developments. Using an approach such as the MPI would allow the collection of data of both individual (and household) development indicators in areas of education and health, and at the same time allow the researchers to create a more multidimensional measure of development. The MPI indicators also has the

advantage of including a proxy for household wealth through an asset indictor, but does not require traditional wealth data such as household income, consumption or expenditures, which are time consuming to collect in a survey.

A common criticism of the development frameworks that have been explored in the literature is that the capabilities and indictors are chosen without a clear framework that determines internal priority, weights, etc. An alternative approach could be to let national development plans and other official documents on development priorities guide the design of conceptual and methodological frameworks and survey tools. This would ensure that the topics and data analysed are in line with national priorities. As a reference, Annex A includes a summary of the development plans of the ten countries in the MIGNEX project.

In addition, as highlighted above, development is also systemic and determined by the capacity of policy to provide the circumstances for well-being on a sustainable, long-term basis (Barder, 2012), which also applies to the realisation of the development potentials of migration (de Haas, 2010). Hence, collecting complementary data that captures factors that facilitate and enable migrants and their families to contribute to development could further strengthen the analysis. This could for example be survey questions on access to financial services and financial (literacy) training, access to public services of good quality (such as education or health facilities), or complementary data collections carried out at community level that capture the migration and development policy framework in the migration origin area.

Conceptual and methodological aspects

Having reviewed key definitions and the operationalization of measures related to migration and development, this section moves on to discuss conceptual and methodological aspects to consider when assessing development impacts of migration. The section starts by discussing the channels and levels through which migration affect development. It then reviews methodological approaches to address some of the challenges in establishing a causal link between migration and development, and provides some recommendations for future research.

Conceptualizing the link between migration and development

There are many channels through which migration can affect development outcomes. A significant part of the literature investigates the development impacts of migration via financial remittances. However, there are also channels through which migration in itself affects development. Migration can for example reduce pressure on the labour market, stimulate transfers of skills, knowledge and norms, and increase incentives for individuals in the origin community to acquire more education (so called '*brain gain*'). On the other hand, emigration may have negative impacts on household wellbeing and development through the costs linked to the loss of labour/income when a member is leaving, social costs from family

separation, and debt accumulation from financing emigration. The negative impact of emigration may be compensated by remittances, but it is important to keep in mind that not all migrants send remittances. As discussed in the previous section, since different development dimensions are often analysed in isolation, and not compared to each other, the issue of social cost versus economic benefit is significantly unexplored in the migration and development literature. There is also a gap in the literature regarding time dimensions, i.e. development impacts on short, medium and long term effects.

Return migration can affect development in the country of origin through, for example, skills, knowledge and capital transfers. Given the data gaps, research on the development impacts of return migration is less developed than impact from emigration and remittances. A growing body of studies in recent years have, however, shown that return migration can bring positive development outcomes such as increased levels of entrepreneurship and knowledge transfers (McCormick and Wahba, 2001; Wahba and Zenou, 2012)

The impact of financial remittances on various development outcomes is well studied. Remittances can help alleviate household credit constraints, smooth consumption and contribute to short- and long-term investments and poverty reduction. Remittances constitute and important share of income for a large number of households in low and middle-income countries, and is there likely to have a significant development impact in these settings. The impact of remittances on inequality is however more ambiguous (Acosta et al., 2008; Barham and Boucher, 1998).

Finally, migration can also affect development through aspirations to move, or through unrealised or failed migration attempts. First of all, individuals with aspirations to move abroad might be less prone to engage in investment activities in the country or place of origin. This effect may be further amplified if the migrant realises that he or she does not have the ability to do so. Migrants are thought to have higher life aspirations than non-migrants, as they are often younger and more educated, which is positively correlated with higher aspirations. Empirical evidence has found that migrants self-select based on higher individual aspirations pre-migration (Czaika and Vothknecht, 2014). In addition, migration can further spur aspiration levels post-migration, which can lead to higher development outcomes in terms of subjective well-being (Ibid.). However, when individuals who aspire to emigrate in the future lack the capability to realise their aspiration, migration may have the opposite impact on aspirations. Involuntary immobility may cause individuals to adjust their aspirations *downwards* to avoid continued unhappiness because of unfulfilled aspirations. This phenomenon has been labelled the *aspiration trap*. Individuals who find themselves in a place where they do not see much of a future, adjust their aspirations to fit their reality. This may in turn impede forward-looking wellbeing enhancing behaviours such as investments in higher education or other long-term investments. Involuntary immobility would, in this case, lead to negative development outcomes not only at the individual and household level, but also at community level where aspiration traps prevent broader economic and social change (Czaika and Vothknecht, 2014).

The various ways through which migration affects development can also be divided into two types of effect:

- *Direct effects*, such as remittances used for educational purposes that enhance school attendance or enrolment
- *Indirect effects* via changes in attitudes and behaviour that are likely to affect development outcomes. For example, migration may lead to changes in attitudes towards corruption.

It is also important to consider development effects at different levels (Chappell and Sriskandarajah, 2007). Migration generally affects development at five levels: (1) individual (e.g. migrants enjoying higher wages due to emigration); (2) household (e.g. increased education spending in the household left behind due to remittances); (3) community (e.g. increased demand for consumption goods due to remittances); and (4) regional economy and (5) global economy (e.g. more efficient allocation of labour regionally and globally).

These different levels are interlinked and jointly determine the full scope and nature of the impact of migration on development. Yet, empirical studies are often focused on one or a few development outcomes, at one or two levels.

Addressing endogeneity issues

The common approach to assess the development impacts of migration is to use data from the country or place of origin and compare development outcomes of individuals or households with migration experience (e.g. emigration, remittances, return migration) to those without migration experience. This approach is, however, challenging due to three main reasons: reverse causality, self-selection and omitted variables (Sasin and McKenzie, 2007).

1. Attributing causality

Capturing the causal impact of migration on development is difficult, as development may be the driver of migration rather than the other way around. It is not always easy to establish that migration is really causing the development outcome one is interested to measure. For example, policy makers may respond to emigration flows by introducing development programmes to support income activities in the community of origin. This would show a positive correlation between development interventions and out-migration, while the direction is in fact the reverse: migration is causing the development interventions.

2. Self-selection

Migrants (and their households) are not randomly selected, and may have different characteristics than non-migrants (and their families). Evidence has shown that migrants differ from non-migrants in characteristics such as motivation, skills, ambition, access to networks and risk preferences (McKenzie, 2015). If these differences are systematic, it can affect the estimates of the development impacts of migration. For example, a positive association between entrepreneurship and remittances may reflect the

income effect of remittances on entrepreneurship, but it may also reflect that households with entrepreneurial skills are more likely to finance family migration in the first place. Using non-migrant household as the comparison group would not reflect the true impact of remittances on entrepreneurship in the latter case. More sophisticated methods are required to capture causal impacts.

3. Omitted variables

Omitted variable bias arises when not all relevant variables to capture the causal link between migration and development are included in the analysis. For example, some human characteristics, such as level of ambition or drive are hard to capture in household or individual surveys. In addition, the data may not include all relevant factors that simultaneously could affect both migration decisions and development. For example, a negative shock may at the same time push people to emigrate and generate negative development outcomes for migrant households in the country or place of origin. If the shock is not taken into account, the correlation between out-migration and deteriorating development in the place of origin may mistakenly be assigned a causal relationship.

Several methods to address these challenges have been suggested in the literature, including exploiting random natural occurrences, controlled experiments, panel data and instrumental variables (Baláž and Williams, 2017; McKenzie, 2015; Sasin and McKenzie, 2007). The choice of methodology is often driven by data availability and by contextual factors.

Experimental methods

A small but growing number of studies have used experiments to address selectivity issues and investigate the causal impact of migration on development. Experiments could be either 'natural' or researcher-induced, so called *true experiments* (Baláž and Williams, 2017). In natural experiments, the conditions are determined by natural events or by other factors outside the control of the researcher, and outcomes are typically investigated before and after the event took place across those that were affected by the event (treatment group) and those that were not (control group).

The empirical literature is often based on quasi-experiments, meaning that researchers investigate the situation pre- and post- the event that took place, but without having full control of the randomization into treatment and control. Examples of events that have been exploited in the migration literature include economic crises, natural disasters or immigration regulations (Baláž and Williams, 2017). For example, Yang (2008) investigates the effects of an economic shock in the form of a drastic change in exchange rate between the Philippines and certain migration destination countries, which led to an increase in the amounts that households in the Philippines received from these countries, while Chand and Clemens (2008) take advantage of a political shock in Fiji to investigate impacts of a large emigration flow on human capital accumulation. Others have analysed policy experiments, such as a series of papers that exploited the randomness in visa lotteries to New Zealand in the Pacific islands Samoa and Tonga on

various development outcomes (Gibson et al., 2013, 2011; McKenzie et al., 2007; Stillman et al., 2009), and a paper analysing the impact of a change in the immigration policy scheme on school results of immigrant children in Switzerland (Cattaneo and Wolter, 2012).

Researchers can also design experiments where the researcher manipulates or simulates changes in the institution or environment shaping migration behaviour and randomizes the sample into treatment and control groups (true experiment). True experiments can take place either in the lab or in the field. Examples of randomized field experiments in migration include a study of the impact of bank accounts with different degrees of financial control on savings among Salvadoran migrants in the United States (Ashraf et al., 2015), and other types of interventions to affect remittance behaviour through for example matched funds (Ambler et al., 2015), financial training (Doi et al., 2014) and free international calling credit (Batista and Narciso, 2018). Lab experiments are much more limited in the field of migration and development. The limited literature using laboratory experiments in migration research has so far focused on migration decision-making (Bah and Batista, 2018; Baláž et al., 2016; Barnett-Howell, 2016) rather than development impacts from migration.

The advantage of experimental methods is the ability to address self-selection issues, and the interest in using such methods in migration research has increased in the past decade. Natural experiments have an advantage in that already existing data can be used to study behaviour under real world conditions. The disadvantage is that the researcher has limited or no control over the sample or over the event around which the experiment is built. It is also hard to replicate a natural experiment, and the geographical scope is usually limited as illustrated by the empirical evidence to date that is concentrated to a few geographical contexts, notably small island states. In true experiments, the researcher controls the sample selection and the event that is expected to change behaviour. However, the external validity may be weak, i.e. findings from a true experiment may be hard to generalise to populations beyond the sample that participated in the experiment. True experiments in the form of field experiments are better at mimicking real life situations than lab experiments, but in the former the researcher has less control of other factors that may affect behaviour. There has also been some general critique towards relying too much trust in randomized experiments, which requires very little prior contextual knowledge, and also focus on methods that develop conceptual and theoretical frameworks to be able to determine not only 'what works' but also 'why things work' (Deaton and Cartwright, 2018).

Non-experimental methods

There are also a number of non-experimental methods that can be used to estimate development impacts of migration. One way of addressing endogeneity in the migration literature is the use of instrumental variables. The idea behind instrumental variables is to find a variable that is correlated with the migration variables (migration, remittances, etc.) but uncorrelated with the unobserved characteristics causing the estimation bias (e.g. ability, motivation), to separate the effect of migration from the effect of the selection mechanism. Finding a good instrument requires good knowledge of

the economic, institutional and social context. Examples of instruments that have been used in empirical migration research include distance to a border or consulate (McKenzie et al., 2010), historical state-level migration flows (McKenzie and Rapoport, 2007; Woodruff and Zenteno, 2007), migration networks (Hildebrandt et al., 2005), economic shocks (Martínez and Yang, 2007) and rainfall (Munshi, 2003). Research comparing different methodological approaches has shown that a good instrument is efficient in addressing estimation biases from the above-mentioned issues (McKenzie et al., 2010). However, finding good instruments is difficult, and the use of instruments that do not fulfil the basic requirements can result in significantly biased estimates (Ibid.).

Other non-experimental approaches include methods that create a counterfactual, so called selection-correction models (Barham and Boucher, 1998; Lopez et al., 2007), or the use of matching method, such as propensity score matching (Chowdhury and Radicic, 2019; Cox-Edwards and Rodríguez-Oreggia, 2009). Selection-correction models use econometrics to create a fictive counterfactual situation that reflects what the outcome for a migrant (household) would have been had the migrant never left. Matching methods matches each migrant (household) with a set of non-migrants (households) with as identical or very similar characteristics, to create a comparison group that is as close as possible to the migrant (household) sample. As discussed above, it is, however, likely that the selection bias arises due to both observable and unobservable characteristics. In this case, a selection models or matching method would not be efficient in fully addressing the self-selection bias.

Having access to panel data, that captures migration behaviour and development outcomes over time, can considerably improve the analysis of causal impacts. Ideally, one would like to have data before and after migration (or remittances). If panel data is not available, retrospective data that captures key information in the past can be used to estimate a difference-in-difference regression, which controls for time invariant characteristics. This methodology can also be combined with ´an instrumental variable approach to improve the methodological approach.

Finally, one can also estimate development impacts using a standard regression framework such as Ordinary Least Square (OLS) estimations, controlling for observable socio-economic and demographic factors (e.g. age, gender, occupational status, household wealth). An advantage with OLS is that it is a straightforward technique and does not require the identification of an exogenous shock or instrumental variable. OLS is, however, generally not recommended if one is interested in the causal impact of migration on development in a context with migrant selection, which would lead to biased estimates. There is now a relatively large evidence base showing that migrants do indeed self-select, even though the nature of selection can differ across country contexts (see for example Gibson et al., (2013). However, there might be contexts with less self-selection, such as forced migration due to conflict where migration decision can be argued to be exogenous rather than based on self-selection (Ruiz et al., 2015; Ruiz and Vargas-Silva, 2013).

Studies using the methodological approaches discussed above are usually only taking one type of selection into account. However, the selectivity

problem can be more complicated than that, especially if the intention with the research is to study impacts of migration beyond just emigration. The migration process contains several stages of self-selection. People can first of all select into becoming a migrant or not. In the next steps, they also decide about whether to send remittances and whether to return, which give rise to further self-selection issues, known as the triple selectivity problem. For example, analysing how return migration affects development implies that there might be selection into emigration in the first place, selection in who returns back to the country or place of origin, and selection into labour market activities back in the place of origin.

There is limited research addressing multiple self-selection issues. One exception is a paper by Wahba (2015) using the Egypt Labour Market Panel Survey (ELMPS) and a multi-equation mixed system approach that make use of the rich retrospective migration data collected in the 2006 round, together with the creation of additional variables capturing shocks such as changes in oil prices to address the triple-selectivity problem. Another example is a study by Batista (2017) that studies return migration and entrepreneurship by making use of the retrospective nature of the data and contextual factors in the form of exogenous shocks (war events and plague outbreaks) to address double-selectivity in who emigrates and who returns. These methodologies require rich data, especially with respect to the timing of different migration events and at the same time some external factor (such as negative shocks). Finding data that fulfils these requirements is often very difficult.

Furthermore, survey data seldom captures selection in which a full household emigrates. If no member remains, surveys conducted in the place of origin will not capture this type of selection. An exception would be if there is a way to track households who left the community in the past, which requires panel data and sufficient resources to be able to track down emigrant households.

Implications for future data collection

Conceptualising the links between migration and development reveals many channels through which migration can affect development. Many have already been explored quite extensively in the empirical literature, while others have been less studied. Two areas where there is scarce or significantly less existing literature is the link between immobility and development, and indirect impacts of migration on norms and values. Future data collection efforts could, therefore, contribute to closing research gaps by collecting data related to two main areas:

- life aspirations
- attitudes and norms

Life aspirations can be used to capture development impacts of failed migration and involuntary immobility. As discussed above, it is possible that individuals who would like to emigrate but are unable to do so adjust their life expectations downwards, including lower life aspirations in dimensions such as education and wealth. Several instruments to measure different dimensions have been developed and applied empirically. An example is

Bernard and Taffesse (2014) who developed an instrument to measure aspirations in four dimensions: income; wealth; education; and social status. As pointed out by the author, using this type of survey instrument requires experienced enumerators.

Furthermore, migration can affect development through the transfers of norms and values, which has an indirect impact on development outcomes. To be able to measure these impacts on a micro level, future survey data should collect more information about attitudes towards, for example, corruption and gender.

This section also showed that estimating *causal impacts* of migration on development involves a number of challenges, notably ways to address migrant selectivity. Future data collection initiatives should learn from the methodological developments to date. Ideally, researchers would identify some sort of external economic or institutional change that can be exploited as a quasi-experiment to address selectivity. The ideal situation would also include baseline data of the situation before the change happened. If this kind of data is not available, a survey could collect retrospective data. Retrospective data are, however, subject to recall bias, and having access to data collected pre-and post- strengthens the data considerably.

Even without an experimental approach, panel data is helpful in addressing endogeneity. Collecting panel data is, however both costly and time consuming, and not always an option. An alternative may be to follow-up on an already existing dataset and build a panel by adding one extra round of data where the baseline has already been collected.

However, researchers often have to settle for cross-sectional data, in which methodologies such as propensity score matching can be an option, although it would only address selection based on observables, which is not likely to solve all estimation issues.

It should also be mentioned that other methodologies can be used to complement the quantitative analysis and strengthen the analysis. For example, a recent MIGNEX paper discusses applications of Qualitative Comparative Analysis (QCA) in migration studies, as a method and complement to other methodologies (Czaika and Godin, 2019). Other data sources, such as community and qualitative data, can contribute to a deeper understanding of the link between migration and development, and provide more in-depth insights on potential sources of selection biases.

Approaches from a multi-country project perspective

This section reviews the approaches and methodologies adopted by two previous large-scale, multi-country and multi-disciplinary projects with the objective to analyse the linkages between migration and development. A common feature of these studies is that they have use new primary data collected specifically for the purpose of the project objective. The projects are reviewed based on three main elements (1) selection and operationalisation

of migration aspects; (2) selection and operationalisation of developing dimensions; and (3) methodological approach and considerations.

Development on the move

The project *Development on the Move: Measuring and Optimising Migration's Economic and Social Impacts* was carried out jointly by the Global Development Network (GDN) and the Institute for Public Policy Research (IPPR) between 2006 and 2010 (Chappell et al., 2010). The aim of the project was to examine a wide range of migration and development impacts using primary survey data collected in Colombia, Fiji, Georgia, Ghana, Jamaica, Macedonia and Vietnam. The project designed a new and holistic approach, with a broad focus in terms of both migration aspects and development dimensions. The research focused on five migration aspects:

- Emigration
- Immigration
- Return migration
- Remittances
- Other diaspora activities and transfers

The migration data was collected through household interviews with a member of the households in the place where the survey took place and focused on international migration. Questions about absent migrants were answered by proxy through a household member present in the household. Box 1 shows the migration definitions adopted by the project.

The definition of a migrant is based on a rather short time interval of three months, which is shorter than standard surveys that typically chose a cut-off at either 6 months or 12-months. The 3 months definition was chosen in order to incorporate short-term, irregular and seasonal movement. Secondly, the emigration definition only includes those that migrated in the past 10 years. This cut-off was chosen to minimise 'recall errors', which is likely to increase with time. In this case, the data is collected by means of proxy, and asking people about former members of the household who left more than 10 years ago and is likely to generate some bias. The project report also points out that a weakness with the approach is not being able to capture absent migrants who left together with all of their members. Collecting emigration data in the country or place of origin means that households where all members emigrated will not be included in the sample.

Box 1. Migration definitions in Development on the Move

If data for both citizenship and place of birth is available, the following three categories can be identified:

- **Immigrant**: a person who was born in another country but has come to live in the country of our study

- **Return-migrant:** a person who was born in the country of study and who lives there now but who at some point has lived in another country for three months or more.

- **Absent migrant:** a person who was born in the country of our study but who, within the last 10 years, left to go and live in another. Absent migrants are still leaving abroad.

Source: Chappell et al., 2010.

The project report does not specify any official definition of remittances. However, remittance data was collected through several questions, including if the household receives/sends remittances, and if yes, from/to which country. It also contained information about whether the remittances were sent through formal or informal channels.

Taking the starting point in the capabilities approach and the livelihoods approach, the project landed in a definition of the development process as a process of expanding the substantive freedom that allow people to live their lives in the way that has value for them. They project therefore aimed to examine migration impacts that can affect the substantive freedoms that people enjoy. The project thus aimed at capturing development impacts across a range of aspects of development, and at different levels, with five prioritised development dimensions:

- Economic
- Education
- Health
- Gender
- Wider social impacts

The methodological framework consisted of a number of tools, including a nationally representative household survey and interviews with key stakeholders. The household survey was carried out with both migrant and non-migrant households, and included topics related to household members' characteristics, migration experiences, as well as socio-economic information on the households (such as household consumption, income).

The analysis carried out compared migrant and non-migrant households in terms of development outcomes. In order to address endogeneity, the analysis made used of several different estimation techniques and other design features, including:

- Advanced econometric tools (propensity score matching and instrumental variables where possible)
- The use of retrospective questions to investigate and control for changes over time
- Elicit cause and effect by asking migrants directly what they believe caused development outcomes
- Contextualise findings using secondary literature and interviews to help explain patterns in the data

Interrelations between public policy, migration and development (IPPMD) project

The *Interrelations between Public Policy, Migration and Development* (IPPMD) Project was carried out by the OECD Development Centre, with funding from the EU Commission, between 2013 and 2017 (OECD, 2017). The project was implemented in ten partner countries: Armenia, Burkina Faso, Cambodia, Costa Rica, Cote d'Ivoire, Dominican Republic, Georgia, Haiti, Morocco and the Philippines. The aim of the project was to analyse two key questions: how migration, in its multiple dimensions, affects a variety of key sectors for development; and how public policies in the sectors under study can enhance, or undermine, the development impact of migration.

A conceptual framework was designed to explore the links between four aspects of migration: (1) emigration; (2) remittances; (3) return migration; (4) immigration. However, not all migration aspects were examined in all countries. While emigration, remittances and return migration were included in the analysis in every country, the immigration was only analysed in countries that had significant share of immigrant population (e.g. Cote d' Ivoire, Costa Rica, Dominican Republic).

The project defined a migrant as someone that has been abroad for at least 3 months, to include both longer and shorter migration spells and include seasonal migrants. Temporary trips such as holidays were however excluded from the definition, and the reason for migration was identified in the beginning of the survey to exclude shorter trips for holidays, visiting friends etc. All emigrants who left the household more than 3 months ago were included, and did not put any restrictions on the amount of time that elapsed since the time of emigration, immigration or return migration (

Box 2). The key definitions were slightly modified in some of the partner countries due to country-specific contexts. For example, a particular migrant group in the Philippines are seafarers, which are sometimes excluded from national migration data collections. The definition in the Philippines hence explicitly stated that seafarers are included under the migration definition. In Armenia and Georgia, the definition was adjusted to take into account the dissolution of the Soviet Union and only recorded migration data from 1990 and onwards.

Box 2 Key definitions in the IPPMD project

- **A household**: consist of one or several persons, irrespective of whether they are related or not, who normally live together in the same housing unit or group of housing units and have common cooking and eating arrangements.

- **Migrant household:** a household with at least one current international emigrant, return migrant or immigrant.

- **Non-migrant household:** a household without any current international emigrant, return migrant or immigrant.

- **International emigrant:** an ex-member of the household who left to live in another country, and has been away for at least three consecutive months without returning.

- **International return migrant:** a current member of the household who had previously been living in another country for at least three consecutive months and who returned to the country.

- **An immigrant:** a member of the household who was born in another country and has lived at least three months in the host country.

- **International remittances:** cash or in-kind transfers from international emigrant. In the case of in-kind remittances, the respondent is asked to estimate the value of the goods the household received.

- **A remittance-receiving household:** household that received international remittances in the past 12 months prior to the survey. Remittances can be sent by former members of the household as well as by migrants that never been part of the household.

OECD (2016)

The project explored development impacts in five key policy sectors:

- the labour market
- agriculture
- education
- investments
- financial services
- social protection and health.

The project also explored the impact of these five sectoral policies on a range of migration outcomes, including the decision to emigrate or return home, the amount of remittances sent and how they are spent, as well as the integration of immigrants. The focus on the five development dimensions was based on a review of the migration-development literature, as well as

consultations with the partner countries, to make sure that priorities of the project were in line with priorities in the countries.

The methodological framework was developed by the OECD Development Centre in consultation with local research partners in the partner countries, who implemented the data collection.

The analyses were based on primary data from three survey tools: (1) a household survey; (2) community surveys; (3) key stakeholder interviews.

In order to reach sufficient samples of migrant populations, migrant populations were oversampled for the household survey.

Given the cross-sectional nature of the data, a few design features to strengthen the analysis included:

- Retrospective questions on the household's previous public policy participation and migration experiences to single out emigration decisions that took place after the household benefited from a specific policy (hence minimise issues of reverse causality)
- Detailed modules on both migration and remittance experiences to allow distinctions between the effect of migration and the effect of remittances.
- Multiple data sources, such as community surveys and the qualitative interviews, enriched the data collected through the household surveys.

The retrospective data time frame was set at 5 years, since the project wanted to prioritise recent policies and migration decisions in the analysis. However, migration that took place further back in time was also included, so that this could be controlled for in the analysis.

Conclusion and recommendations for future research

This paper has reviewed key concepts and approaches when assessing the development impacts of migration, with a specific focus on data operationalisation, measurement and methodological approaches.

The review first highlighted that migration can affect development in multiple ways, some of them more explored in the literature than others. Among the migration aspects discussed in this paper (migration aspirations, failed migration attempts, involuntary immobility, emigration, immigration, return migration and remittances), there is a vast amount of evidence related to impacts of remittances and emigration, while the development impacts of migration aspirations, failed migration attempts and involuntary immobility is un- or under explored. This offers a clear opportunity for the MIGNEX project to fill several research gaps.

The review also showed that previous studies often focus on one single, or a limited number of, development dimensions at a time, instead of being concerned with broader development approaches and a more holistic view of development. Designing migration research that investigates the

development impacts of migration from a more holistic, multi-dimensional approach would, therefore, add value to the existing evidence.

As migration may have different, and opposing, effects on development outcomes, it is important to include a wider set of migration variables in data collection and analysis of development impacts, to make sure that both potential positive and negative impacts are captured as well as the mechanisms through which these effects manifest themselves.

This paper also pointed to a few fundamental methodological challenges when estimating causal impacts of migration on development. Given challenges of endogeneity, it is very difficult to capture causal impacts of migration on development without experimental and/or panel data that allows for more advanced estimation techniques that can minimise issues of reverse causality, selection bias and omitted variable bias.

Taking these observations from the literature together (and brought together in this paper), there are a few concrete lessons to be learned for future research, which are summarised here:

- Future research should pay more attention to developing frameworks and collect data on migration aspirations, failed migration and life aspirations. This paper gives some suggestions on how such data collection can be operationalised in a survey setting.

- Surveys should collect data on a range of different aspects of development, with a focus on measures that strengthen individual and household capability of steering its own future. A pre-specified set of development outcomes that can be analysed separately as well as compiled into a multidimensional index, such as the MPI, is a promising approach.

- Random sampling is unlikely to generate a sufficient sample of households or individuals with migration experience in most contexts. Even though random sampling has advantages, oversampling of certain migrant groups is recommended for surveys for the purpose of migration and development studies.

- Studies on the impact of migration have focused on certain dimensions, especially economic and social. Other dimensions, such as the transfers of norms, is an understudied area. To address this, migration and development surveys should include some information related to attitudes towards, for example, corruption, the environment and gender.

- Issues of endogeneity can be addressed using experimental data or instrumental variables, preferably in combination with panel data. When such data is not available, projects can benefit from the use of a combination of other methods and data to minimise endogeneity, such as retrospective data and multiple data sources (community and qualitative), as well as detailed information about migration and development outcomes.

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Annex A: Development priorities of the MIGNEX countries

Apart from definitions by academics and the international community, countries also have their own definitions of development, and set their development priorities. The priorities often appear in national documents such as development plans, mission statements or other key documents. This section reviews the development priorities and focus areas of MIGNEX partner countries.

The Afghanistan National Peace and Development Framework (ANPDF) is a five-year strategic plan (2017-20121) for achieving self-reliance with the overarching goals of reduced poverty and improved welfare of the its people. The main objective is to promote sustainable job creation to improve public welfare (quality education and health services) and support Afghanistan's progress towards achieving the SDGs.

Cabo Verde's Strategic Plan for Sustainable Development 2017 -2021 (PEDS) defines four key objectives: i) making Cabo Verde a Circular Economy in the Middle Atlantic; ii) Guarantee sustainable economic development; iii) Assure social inclusion and reduce inequalities (including education and professional training, health and social security, job creation and youth and gender equality); iv) Strengthen democracy, justice and international diplomacy, and engage the diaspora.

Ethiopia's second Growth and Transformation Plan (GTP II) 2015/16-2019/20 is based on its vision to reach the level of lower middle-income countries where democracy, good governance and social justice are maintained through people's participation. The overarching objective of the GTPII is to sustain the accelerated growth and establish a spring board for economic and structural transformation. Five specific objectives have been specified to achieve the vision : i) Achieve an annual average real GDP growth rate of 11 percent within a stable macroeconomic environment ii) Develop the domestic engineering and fabrication capacity and improve productivity, quality, and competitiveness of the domestic productive sectors, iii) Further solidify the on-going public mobilization and organised participation to ensure the public become both owners and beneficiaries from development outcomes, iv) Deepen the hegemony of developmental political economy by strengthening a stable democratic developmental state.

Ghana's development priorities include four kind of development: economic; social; environmental and institutional. In addition, Ghana has a long-term plan, launched in 2018, with the vision of achieving "a just, free and prosperous society" by 2057. The plan includes five overarching goals: (1) build and industrialised, inclusive and resilient economy; (2) Create an equitable, health and prosperous society; (3) Build well-planned and safe communities while protecting the natural environment; (4) Build effective, efficient and dynamic institutions for national development; (5) Strengthen Ghana's role in international affairs.

Guinea's National Plan for Economic and Social Development (PNDES) (2016-2020) aims to contribute to a structural transformation of the national economy putting the country on a growth ramp that creates wealth and jobs.

It relies on four pillars: i) Promoting good governance for sustainable development; ii) Sustainable and inclusive economic transformation; iii) Inclusive development of the human capital; iv) Sustainable management of natural capital.

Nigeria's Vision 20:2020 focuses on two broad objectives: 1) to make efficient use of human and natural resources to achieve rapid economic growth; and 2) to translate the economic growth into equitable social development for all citizens. The strategies to achieve these objectives include four objectives: i)to urgently and immediately address the major constraints to Nigeria's growth and competitiveness; ii) to aggressively pursue a structural transformation of the economy from a mono-product to a diversified and industrialized economy; iii) to invest in human capital to transform the Nigerian people into active agents for growth and national development; iv) to invest in infrastructure to create an enabling environment for growth, industrial competitiveness and sustainable development.

Pakistan's development vision 2025, 2014-2025 relies on seven priority pillars: 1. People First: Developing social and human capital and empowering women; 2. Growth: Sustained, indigenous, and inclusive growth; 3. Governance: Democratic governance: institutional reform and modernization of the public sector; 4. Security: Energy, water, and food security; 5. Entrepreneurship: Private Sector and entrepreneurship-led growth; 6. Knowledge Economy: Developing a competitive knowledge economy through value addition; 7. Connectivity: Modernizing transport infrastructure.

Somalia's Development Plan 2017-2019 (NDP) aims, among other things, to achieve 8 key results: 1) Secure environment, more open politics and reconciliation; 2) Reduced abject poverty; 3) More resilient communities that can withstand internal and external shocks' including cyclical droughts and other natural disasters; 4) Vibrant economic sector, with particular focus on agriculture, livestock and fishing; 5) Increased availability and accessibility of quality of basic education, health, water and sanitation services; 6) Improved health outcomes, reduced maternal and child mortality, reduction in malnutrition rates as well as prevention and control of communicable and non-communicable diseases; 7) Increased employment opportunities and decent work particularly for the youth; 8) Federal political and economic framework that empowers the federal member states to deliver services and economic opportunities to the citizens of Somalia in a secure environment;

Tunisia's development plan 2016-2020 includes 3 objectives: i) efficiency, ii) inclusion and iii) sustainability. The plan includes five reforms to achieve the objectives: 1) Good governance, administrative reform and fight against corruption; 2) From a weak economy to an economic hub; 3) human development and social inclusion; 4) Realization of regional ambitions; 5) Green economies and sustainable development.

Turkey's tenth development plan (2013-2018) specifies a human oriented development approach for humanity and distributing welfare to all segments of society as the basic priorities. In the path to achieve these main aims, Turkey will rely on the principles of participation, inclusiveness, accountability, transparency and human orientation in pursuing the development process with a holistic approach and adopting this process at

political and social level. The Government has recently submitted its 11th development plan to the parliament (2019-2023).

This overview shows that although development priorities differ across countries, all countries have development objectives and priorities related to both economic and social development. Growth and human capital are the most common areas of focus. However, a significant number of the MIGNEX countries have also put forward priorities related to environmental and institutional development, and a few have a focus on all four dimensions of development. One country (Cabo Verde) has included an explicit reference to migration (diaspora) among its development priorities. It is also worth mentioning that with the adoption of the of the Global Compact on/for Migration, UN Sustainable Development Cooperation Frameworks, which are implemented along National Development Programmes, are very likely to include components and aspects of migration and development. With such priorities for development, more data and research on the topic is likely to follow.