



MIGNEX Handbook Chapter 6

QCA conditions and measurement

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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.

See www.mignex.org.



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The MIGNEX Handbook

The MIGNEX Handbook grows chapter by chapter over the lifetime of the project. It is primarily as a tool for internal information-sharing and quality assurance. The text refers to 'we' as the team members and 'you' as an individual team member reader. The handbook is public in order to ensure transparency and facilitate knowledge exchange also on issues such as project management, methodology and communication.

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Contents

6.1 Introduction 1

6.2 Research questions 2

6.3 Research Design 3

6.3.1 QCA methodology: cases, conditions, outcomes 3

6.3.2 Naming, defining, and specifying conditions 4

6.3.3 Data elements and methodological triangulation 5

6.3.4 Research area selection 5

6.3.5 Migration outcomes 6

6.3.6 Development outcomes 6

6.4 QCA themes and conditions 7

6.4.1 Livelihoods and economic opportunities 8

QCA Condition 1A: Abundant livelihood opportunities 8

QCA Condition 1B: Expanding livelihood opportunities 8

Potentially relevant measures 8

6.4.2 Well-being and standard of living 8

QCA Condition 2A: High levels of well-being and standard of living 8

QCA Condition 2B: High levels of poverty and inequality 9

QCA Condition 2C: Large intergenerational improvement in standards of living 9

Potentially relevant measures 9

6.4.3 Health: access and quality 9

QCA Condition 3A: High levels of access and quality in health care services 9

QCA Condition 3B: Prevalence of good health outcomes 9

Potentially relevant measures 9

6.4.4 Education: access and quality 9

QCA Condition 4A: High levels of access and quality in education 10

QCA Condition 4B: High levels of educational attainment 10

QCA Condition 4C: Large intergenerational increase in educational attainment 10

Potentially relevant measures 10

6.4.5 Social protection 10

QCA Condition 5A: High level of social protection 10

Potentially relevant measures 10

6.4.6 Infrastructure and utilities 10

QCA Condition 6A: High levels of access to public infrastructure and utilities 10

Potentially relevant measures 11

6.4.7 Governance and institutions 11

QCA Condition 7A: High quality of governance and institutions 11

Potentially relevant measures 11

6.4.8 Civic participation 11

QCA Condition 8A: High level of civil rights and participation 11

Potentially relevant measures 11

6.4.9 Insecurity and violence 11

QCA Condition 9A: High levels of physical insecurity and violence 12

QCA Condition 9B: Increasing physical insecurity and violence 12

Potentially relevant measures 12

6.4.10 Environmental degradation and natural disasters 12

QCA Condition 10A: High levels of environmental degradation 12

- QCA Condition 10B: High exposure to natural disasters 12*
Potentially relevant measures 13
- 6.4.11 International presence 13
QCA Condition 11A: High level of international presence 13
Potentially relevant measures 13
- 6.4.12 Culture, religion, cohesion, and local attachment 13
QCA Condition 12A: Large proportion of long-resident families 13
QCA Condition 12B: High level of mutual trust 13
QCA Condition 12C: High levels of conservatism and conformism 13
Potentially relevant measures 13
- 6.4.13 Gender relations 14
QCA Condition 13A: High level of gender inequality 14
Potentially relevant measures 14
- 6.4.14 Development interventions 14
QCA Condition 14A: High levels of development intervention 14
QCA Condition 14B: Positive assessments of development interventions 14
Potentially relevant measures 14
- 6.4.15 Local investment 14
QCA Condition 15A: High inclination to invest in local businesses or assets 15
Potentially relevant measures 15
- 6.4.16 Overall perceptions of change 15
QCA Condition 16A: Positive assessments of recent local development 15
QCA Condition 16B: Optimistic expectations for the future 15
QCA Condition 16C: Positive perceptions of the general direction of change 15
Potentially relevant measures 15
- 6.4.17 In-migration, transit migration and integration 15
QCA Condition 17A: High levels of immigration 16
QCA Condition 17B: High levels of internal in-migration 16
QCA Condition 17B: High proportion of prospective transit migrants among residents 16
Potentially relevant measures 16
- 6.4.18 Out-migration 16
QCA Condition 18A: High levels of international out-migration 16
QCA Condition 18B: High levels of international out-migration to high-income countries 16
QCA Condition 18C: High levels of internal out-migration 16
Potentially relevant measures 16
- 6.4.19 Return migration 17
QCA Condition 19A: Large presence of international return migrants 17
Potentially relevant measures 17
- 6.4.20 Migrant transnationalism and remittances 17
QCA Condition 20A: Widespread transnational ties 17
QCA Condition 20B: High intensity of transnational communication 17
QCA Condition 20C: High importance of remittances 17
Potentially relevant measures 18
- 6.4.21 Culture of migration 18
QCA Condition 21A: Well-established culture of migration 18
QCA Condition 21B: Predominantly favourable views on migration 18
Potentially relevant measures 18
- 6.4.22 Migration aspirations 18

QCA Condition 22A: High prevalence of aspirations for international migration 19

QCA Condition 22B: High prevalence of aspirations for internal migration 19

Potentially relevant measures 19

6.4.23 Feasibility of migration 19

QCA Condition 23A: High percei 19

Potentially relevant measures 19

6.4.24 Migration policy 19

QCA Condition 24A: Restrictive migration policy at major destinations 20

QCA Condition 24B: Prominent information campaigns to discourage irregular migration 20

QCA Condition 24C: Active emigration policy 20

QCA Condition 24D: Active return and diaspora policy 20

Potentially relevant measures 21

6.5 Selection and calibration of conditions and outcomes 21

6.5.1 Selection of conditions 21

6.5.2 Calibration of outcomes and conditions 21

6.6 Conclusion 22

References 22

Tables

Table 1. MIGNEX data elements 5

Table 2. Crisp versus fuzzy calibration 22

6. QCA conditions and measurement

Analyses within MIGNEX draw upon a combination of different forms of data, brought together by means of the Qualitative Comparative Analysis. This chapter presents the building blocks of these analyses.

—

MIGNEX data from different data collection methods cover 24 themes related to migration and development. Some of the data belong to more than one theme.

—

Data elements are combined to construct 'conditions' and 'outcomes' that are combined in different ways in the analyses.

—

Development-related conditions address perceptions of change and future expectations as well as current circumstances.

6.1 Introduction

This MIGNEX Handbook Chapter introduces the overall research design for the Qualitative Comparative Analysis (QCA) studies foreseen in the project. After providing an overview of the overarching research questions, we outline in detail the outcome variables and the set of conditions to be employed in the various QCA analyses. We further outline the selection procedure of the 25 research areas across ten countries for which QCA analyses will be employed to identify the causal configurations explaining the two-way relationships between migration and specific developments. The foundations of QCA analyses and their application on the migration and development nexus are described in the MIGNEX Background Paper *Qualitative comparative analysis for migration and development* (Czaika and Godin 2019).

- ▶ *Follow-up: Lists of relevant data elements will be added under each thematic sub-section in section 6.4. This is not possible to do until MHC 7–9 have been revised and are available in their final version.*

6.2 Research questions

The MIGNEX QCA analyses will address the following two overarching research questions:

1. What are the necessary and/or sufficient (combinations of) conditions that explain the variation in migration aspirations and outcomes among young adults across 25 areas of origin?
2. Under what circumstances does migration (in combination with other conditions) lead to specific development outcomes across 25 areas of origin?

These two questions capture the core elements of the migration-development nexus. The questions specify the research field of interest and the geographical scope of the analyses. The questions further reveal the main methodological approach ('conditions' and 'outcomes', respectively) and the presumed causal link between conditions and outcomes. Importantly, the outcome in one analysis may feature as a condition in another analysis. The conditions that are defined in section 6.4 might therefore be used in different roles in different analyses.

The research questions refer to 'areas of origin' in the sense that the areas are actual or potential areas of origin of international migration to Europe and/or other destinations. They are, in other words, areas where drivers of migration as well as development impacts of out-migration might be observed. In some areas, a sizeable proportion of the residents are immigrants (or transit migrants) from elsewhere.

The overarching research questions are too generic to be addressed. They are further specified in 12 sub-questions addressed by separate QCA analyses.

The following six sub-questions specify the first research question on the drivers of migration (including migration aspirations). We are interested in a range of different migration outcomes:

1. MIG1. What combination of conditions explains variation in migration aspirations across areas of origin?
2. MIG2. What combination of conditions explains variation in perceptions of migration capability across areas of origin?
3. MIG3. What combination of conditions explains variation in the scale of out-migration across areas of origin?
4. MIG4. What combination of conditions explains variation in the scale of return migration to areas of origin?
5. MIG5. What combination of conditions explains variation in the scale of immigration into research areas?
6. MIG6. What combination of conditions explains variation in the scale of remittances received by residents in areas of origin?

Research question 2 is further specified by another set of sub-questions addressing the effects of migration outcomes on development. 'Migration' can be represented by several types of conditions, including the scale of out-migration and return migration, the prevalence of migration aspirations and failed migration attempts, and the importance of remittances.

1. DEV1. Under what conditions does migration lead to better economic well-being and standard of living in areas of origin?
2. DEV2. Under what conditions does migration lead to better educational outcomes in areas of origin?
3. DEV3. Under what conditions does migration lead to better health outcomes in areas of origin?
4. DEV4. Under what conditions does migration lead to better distributional outcomes in areas of origin?
5. DEV5. Under what conditions does migration lead to less corruption and better governance in areas of origin?
6. DEV6. Under what conditions does migration lead to higher subjective well-being in areas of origin?

6.3 Research Design

6.3.1 QCA methodology: cases, conditions, outcomes

Case knowledge is a fundamental prerequisite of any QCA analysis as it informs the QCA research process. Selection and (non-)selection of cases need to be explicitly defined and justified. Samples should contain equivalent (comparable) but not identical cases since understanding the patterns of similarities and differences of the selected cases is a central objective of any QCA.

Ragin (1987, 2000) originally presented QCA as the comparative methodology for low- to medium-sized research designs. Although numerous studies still justify the application of a QCA with the availability of a mid-sized sample (i.e. approx. 5-30 cases), this criterion is not considered central. QCA can also handle large-N samples 'representative' for larger populations as for instance provided by individual-level survey data. Indeed, QCA is increasingly being applied to large-N samples, which improves the external validity of the results, although it largely precludes familiarity with the individual cases but allows triangulation with complementary statistical techniques and parameters. The actual sample size is rather secondary; it is more important to make best use of a set-theoretical research perspective (Schneider & Wagemann 2012).

Selection and definition of conditions require theoretical understanding of the condition-outcome relationship and substantial background research. Data collection and calibration of conditions should make use of the full toolbox of social scientific methods including surveys, interviews, focus groups, document analysis, etc. For instance, conditions that are testing the role of certain migration policies for explaining migration outcomes may not be as simple as recording the presence or absence of a specific type of policy, but may require, for instance, a comprehensive review and assessment of policy documents and/or expert interviews. Conditions that draw upon survey data might also require substantive preparatory work. For instance, the prevalence of migration intentions might need to be standardized by age and gender before it can be meaningfully used to compare more aggregated research units (e.g. communities, regions, countries).

Similar to multivariate statistical analyses where the number of (possible) explanatory variables depends on the sample size and the variation within the dependent variable, the maximum number of conditions to be tested in a QCA model depends on the number of available cases and their diversity, i.e. how much variation the cases provide for the analysis of the relations between conditions and the outcome.

Another analytical challenge is the determination of the appropriate level of abstraction for defining conditions. For instance, if armed violence is prevalent in a number of cases (e.g. countries, regions, communities), however in some cases it is linked to politically motivated insurgency while in other cases rather associated with violent crime, it needs to be discussed and conceptually justified if the two types of violence are to be treated as a single condition rather than two separate conditions: one for crime and one for insurgency. Other principles are:

- Theory and empirical case knowledge should inform the selection of conditions. The number of conditions should be parsimonious (e.g. 5-8 conditions for sample sizes smaller than 100)
- Case calibration should be theoretically informed and the calibration criteria should be external to the raw data. Data-driven calibration based on means or clusters of the raw data should be justified.
- Theory and empirical case knowledge should inform the selection and calibration of outcomes. The outcome and the negation of the outcome should be dealt with in separate analyses.

For a more detailed discussion of principles of good practice in implementing QCA see Czaika and Godin (2019).

6.3.2 Naming, defining, and specifying conditions

Section 6.4 lays out all the QCA conditions that will be calculated and used in the analyses. The conditions are organized and described as follows:

1. Each condition is placed under one of our 24 themes (listed in section 6.4). There can be one or more conditions under each theme.
2. Each condition is identified by the number of the theme it belongs to, followed by a capital letter: 1A, 1B, 2A, etc.
3. Each condition has a concise name that describes the full set membership of this condition, e.g. ‘High standard of living’ rather than ‘Standard of living’
4. Each condition has a concise definition in the form ‘Extent to which...’ that describes the analytical concept we aim to specify. Even if the available data will only be an approximation, the definition reflects the ‘pure’ analytical concept.
5. Under each theme there is a list of *data elements* (see 6.3.3) that are relevant to the specification of the conditions. The precise combination of data and formulae for transformation into a 0–1 crisp or fuzzy score are specified as part of the initial data analysis, taking into account the empirical variation and data quality issues that cannot be foreseen.
6. In the definition of conditions, the *research area* is always the implicit unit of analysis. When we refer to *residents*, it refers to the population of the research area. Depending on

the nature of each condition and its operationalization, this may be limited to the population of young adults (aged 18–39) who are covered by the MIGNEX survey and focus groups, or to their households.

6.3.3 Data elements and methodological triangulation

A key aspect of the MIGNEX research design is that different forms of data, based on different methods, are combined in the analyses. This opportunity is part of the appeal of QCA. Some of the composite measures (conditions) that are calculated for QCA may also be used in regression analyses and descriptive comparisons of research areas.

Table 1 presents the six types of *data elements* that are generated. We use the term data elements to reflect the diverse nature of data. Four of the types of data elements will be applied directly in the specification of conditions for QCA, while the remaining two provide contextual information.

Table 1. MIGNEX data elements

WP	Source	Type	Units	Application in QCA
WP3	MIGNEX survey data set	Numerical (various scales)	Individuals, households	Input to the specification of conditions
WP4	Coding scales from qualitative data collection	Numerical (4-point scale)	Research areas	Input to the specification of conditions
WP4	Research Area Interim Reports	Text (100–250 words on a topic)	Research areas	Contextual information
WP4	MIGNEX focus group data set	Text (transcripts of discussion)	Research areas	Input to the specification of conditions
WP5	MIGNEX policy database	Numerical (various scales)	Countries	Input to the specification of conditions
WP5	MIGNEX Background Papers on migration-related policies	Text (1000–1500 words on a policy area)	Countries	Contextual information

6.3.4 Research area selection

The selection of cases is an important step in the QCA research process as it has significant implications on the variation in outcomes and conditions in the sample of cases. This again influences the analytical results and the findings of QCA solutions and what MIGNEX will finally be able to say about the migration-development nexus as outlined by the above research questions for the ten countries and 25 research areas.

In the MIGNEX QCA analyses, we define each research area as a case. A research area could be any geographical area, for instance a town, part of a city, or a rural area, as long as it fulfils the other criteria. Each research area is by definition and selection small enough to experience similar outcomes and conditions (as defined below). A research area can be an administrative area, but this is neither a requirement nor a priority in the selection of cases.

The population or society within the research area is, as far as possible, a functional social unit. This is important since all QCA analyses will be at the level of research areas. Research areas, for instance, are (a) a geographically distinct rural area, such as a valley; (b) a town and its surrounding villages, if they are interdependent; (c) a section of a big city that has a clear identity and extensive interaction within its boundaries.

The name of the research area must be meaningful, straightforward and make it easily identifiable. This does not require exact boundaries. For instance, people may talk about their city or neighbourhood even if its boundaries are rather approximate. A research area has typically a population between 10,000 and 100,000. Within this range, the size of the area is primarily determined by other criteria such as population density, security considerations and infrastructure: population density should not be too low (cost-inefficient data collection), security situation must be acceptable (risks for project staff, subcontractors and research participants), and infrastructure for transportation, accommodation and communication must be satisfactory.

Development as a multi-faceted process has multiple, context-specific manifestations that are sometimes contradictory. Some of these manifestations can be identified as ‘specific developments’ that are experienced at the local or regional level. The selection of research areas is guided by the principle of dissimilarity in specific developments. Ideally, each of our research areas is characterized by a unique configuration of specific developments. That is, the selection and definition of the 2-3 research areas per country was guided by the requirement that one or more of the following nine specific developments presumably being present:

1. Severe environmental problems
2. Major livelihood expansion
3. Major livelihood collapse
4. Sustained improvement of security
5. Severe deterioration of security
6. Major social protection reform
7. Major educational expansion
8. Major infrastructure improvement
9. Protracted stagnation

In some instance, these specific developments are evidently present. In others, however, it is a presumption that must be verified empirically. Initially, we therefore refer to *presumed specific developments*. The final sample of research areas and their main characteristics in terms of presumed specific developments can be found in Table A1 in the annex.

6.3.5 Migration outcomes

MIGNEX QCA analyses aim to disentangle complex configurations of conditions explaining various stages and dimensions of a ‘migration cycle’. In total MIGNEX will investigate six different migration outcomes including the formation of migration aspirations and plans, the availability of migration capabilities, actual recent outmigration, actual recent return migration, actual recent immigration, and the receipt of remittances. A recent MIGNEX background chapter (Andersson and Siegel 2019) elaborates in detail possible ways to measure these dimensions.

Some migration outcomes will be composites of two or more different measures that capture the broader concept of each outcome. Relevant measures will then be aggregated *after* the calibration (‘fuzzifying’) of the raw data of each measure (see sub-section 6.5.2 on calibrations). For each of the six migration outcomes and all 25 cases (research areas) a fuzzy score will be assigned.

6.3.6 Development outcomes

In addition to the QCA analyses on migration outcomes, MIGNEX will also implement a number of QCA analyses explaining development outcomes at the level of the research area

including standard of living, poverty and inequality, governance and institutional quality, and well-being. These development outcomes resemble in definition and operationalisation the respective QCA conditions as discussed in the next subsection and are therefore not explicitly presented as development outcomes. In these QCA analyses assessing the impact of specific migration (outcome) conditions on respective development outcomes, above-mentioned migration outcomes are selectively included as key conditions of interest. The selection of migration outcomes in each QCA analysis assessing a specific development outcome is based on theoretical considerations and further discussed in the following section.

6.4 QCA themes and conditions

In the following, we will present the 24 themes and related conditions that will be used selectively in the various QCA analyses explaining migration and development outcomes, respectively. The selection of these conditions is partly informed by a recent meta-analysis and knowledge accumulation exercise identifying major ‘drivers of migration’ (Czaika and Reinprecht 2020). Due to the fact that MIGNEX provides for a relatively low number of cases (25 research areas) for conducting QCA, we have to limit the number of conditions per QCA model to a maximum of five to eight.

The data collected through WPs 3–5 can be categorized under 24 main themes. The first 16 relate to various aspects of development while the remaining 8 have to do with migration:

1. Livelihoods and economic opportunities
2. Well-being and standard of living
3. Health: access and quality
4. Education: access and quality
5. Social protection
6. Infrastructure and utilities
7. Governance and institutions
8. Civic participation
9. Insecurity and violence
10. Environmental degradation and natural disasters
11. International connectedness
12. Local attachment and social cohesion
13. Gender relations
14. Development interventions
15. Local investment
16. Overall perceptions of change
17. In-migration, transit migration and integration
18. Out-migration
19. Return migration
20. Migrant transnationalism
21. Culture of migration
22. Migration aspirations
23. Feasibility of migration
24. Migration policy

In addition, the survey data include a range of individual characteristics (age, sex, etc.) that do not belong to a specific theme.

6.4.1 Livelihoods and economic opportunities

Neoclassical migration theory (Harris & Todaro 1970) suggests that individuals and sometimes entire households migrate due to economic opportunities, such as availability of jobs and employment, at destination and/or lack thereof at the place of origin in order to maximise expected income (or utility). Quantitative studies find that bilateral migration flows respond to unemployment rates, wage differentials, and (lack of) job opportunities, even though magnitudes differ across individuals and countries. Micro level studies add that individual (un-)employment, job satisfaction, and anticipated career opportunities also drive migration decisions. Unemployment might, however, decrease emigration due to poverty constraints. While employment and livelihood opportunities are primary drivers for labour migrants, they have also been found to affect other forms of migration including asylum seeking, albeit in those cases often of secondary importance to other drivers (Hagen-Zanker & Mallett 2016).

QCA Condition 1A: Abundant livelihood opportunities

Definition: Extent to which the local area offers ample employment, business or other livelihood opportunities

QCA Condition 1B: Expanding livelihood opportunities

Definition: Extent to which the local employment, business or other livelihood opportunities are (perceived to be) expanding

Potentially relevant measures

- ▶ *To be added in version 2 of the chapter. in version 2 of the chapter.*

6.4.2 Well-being and standard of living

Personal and household resources include both material and non-material resources that may facilitate or constrain migration. Resources that have been found to affect migration include education, information and access to information and communication technologies (ICTs), but also wealth, assets and property. These resources not only affect whether individuals migrate or not, but also whether they migrate internally or internationally, where they relocate, and which channel they choose. Migrants typically leave their place of origin to improve the returns to their productive skills. A lack of financial resources constrains the poorest who might not be able to afford relocation costs, passports, visas, or a smuggler. However, this might not apply to more developed countries where increasing wealth is often associated with decreased migration. While there is mixed evidence on the relation between migration and poverty, consensus emerged indicating that it is generally not the poorest who migrate (Skeldon 2002). Material and non-material relocation costs are the reasons why the poor are constrained to migrate, even more in situations of crises. However, it is not just absolute deprivation, but also relative deprivation - i.e. feeling poor in comparison to one's reference group within or across countries - that drives migration. The relation between internal relative deprivation, or inequality, and migration is complex and rather ambiguous (Czaika & de Haas 2012, Czaika 2013).

QCA Condition 2A: High levels of well-being and standard of living

Definition: Extent to which residents experience a high level of well-being and standard of living.

QCA Condition 2B: High levels of poverty and inequality

Definition: Extent to which residents experience high levels of poverty and socio-economic inequality.

QCA Condition 2C: Large intergenerational improvement in standards of living

Definition: Extent to which residents see their standard of living as substantially higher than that of the preceding generation.

Potentially relevant measures

- ▶ *To be added in version 2 of the chapter. in version 2 of the chapter.*

6.4.3 Health: access and quality

Healthcare systems and quality differentials can act as a driving factor for different migration forms. The state of the healthcare system and the quality of its services may act as a push factor for the emigration of healthcare professionals from low- and middle-income countries countries plagued by diseases and epidemics such as HIV/AIDS (Awases et al. 2004). Health risks in areas of origin, such as malaria and dengue, drive emigration. Health considerations, often associated with a better accessibility and quality of healthcare services at reasonable cost, are central to various groups of migrants including elderly persons.

QCA Condition 3A: High levels of access and quality in health care services

Definition: Extent to which residents have access to health care services and regard them to be of high quality.

QCA Condition 3B: Prevalence of good health outcomes

Definition: Extent to which residents and their families experience good health outcomes.

Potentially relevant measures

- ▶ *To be added in version 2 of the chapter.*

6.4.4 Education: access and quality

Education opportunities elsewhere and lack thereof areas of origin motivate internal migration, international migration, and often also as secondary motivation of asylum seekers, refugees, and irregular migrants. Generally, educational motivations might be linked to other considerations, such as security, labour market factors, or residency and citizenship. Professional and vocational training and education to advance professional career paths is main driving factor for skilled migration, such as health professionals, and consistently rank among the top reasons given for emigration. Lack of educational opportunities at home is the primary but not only driver of student mobility. Students migrate internally or internationally due to the quality and reputation of universities but also due to available scholarship, costs, and future labour market prospects at the destination (Beine et al. 2014). For instance, cities and regions with good universities not only attract students but also retain graduates, potentially due to available jobs and employer-university interactions. In general, migrants tend to be higher educated relative to those left behind.

QCA Condition 4A: High levels of access and quality in education

Definition: Extent to which residents have access to education and regard it to be of high quality.

QCA Condition 4B: High levels of educational attainment

Definition: Extent to which residents have high levels of educational attainment.

QCA Condition 4C: Large intergenerational increase in educational attainment

Definition: Extent to which residents have substantially higher levels of educational attainment than their parents did.

Potentially relevant measures

- ▶ *To be added in version 2 of the chapter.*

6.4.5 Social protection

The conjecture that welfare services and benefits affect the scale and composition of migration flows has been at the heart of political and academic debates (see ‘welfare magnet hypothesis’, Borjas 1999). Generous social benefits and protection systems are hypothesised to attract low-skilled migrants and deter high-skilled ones due to the implied tax burden. While there is empirical evidence for a selection and attraction effect, other studies question the centrality of the welfare state and highlight the importance of other economic and socio-cultural drivers. While access to social services at the origin might decrease migration, it might also increase migration, as it relaxes financial constraints. Higher welfare spending at the destination may increase migration flows by providing a safety net, depending on how social protection covers migrants.

QCA Condition 5A: High level of social protection

Definition: Extent to which residents have access to social protection.

Potentially relevant measures

- ▶ *To be added in version 2 of the chapter.*

6.4.6 Infrastructure and utilities

The effect of public infrastructure and utilities is ambiguous. High-quality infrastructure might increase migration by decreasing the cost of transportation. Alternatively, it could decrease migration by improving local economic opportunities (Gachassin 2013). Contentment with local public services has been found to reduce the prevalence of migration intentions in low- and middle-income countries (Dustmann & Okatenko 2014).

QCA Condition 6A: High levels of access to public infrastructure and utilities

Definition: Extent to which residents have access to basic public infrastructure and utilities.

Potentially relevant measures

- ▶ *To be added in version 2 of the chapter.*

6.4.7 Governance and institutions

Good governance plays a central role in development processes. Poor governance can affect migration indirectly, via development outcomes. However, it could also have a direct effect on migration aspirations when it is experienced by residents and reduces their faith in local future. In particular corruption has been identified as a potential driver of migration (Carling *et al.* 2015, Dimant *et al.* 2013).

QCA Condition 7A: High quality of governance and institutions

Definition: Extent to which residents experience high-quality governance and low levels of corruption

Potentially relevant measures

- ▶ *To be added in version 2 of the chapter.*

6.4.8 Civic participation

Civil rights establish that individuals should not be subject to unequal treatment due to characteristics such as their gender, race, religion, origin, and sexual orientation. Political rights include the ability to influence the political agenda. Citizenship, or another recognised legal status, is the requirement to be entitled to civil and political rights in origin, transit, and destination countries. Concerns with their legal status have been found to drive secondary migration of asylum seekers and refugees in expectation of (easier) access to refugee status and/or citizenship. Discrimination and a lack of political and civil rights and liberties in countries of origin tend to increase asylum migration.

QCA Condition 8A: High level of civil rights and participation

Definition: Extent to which residents enjoys civil rights and actively engage in democratic life.

Potentially relevant measures

- ▶ *To be added in version 2 of the chapter.*

6.4.9 Insecurity and violence

Civil, ethnic and religious conflict, war, torture, and human rights violations are all drivers of migration, particularly of asylum seekers, refugees, irregular migrants, unaccompanied migrant minors, and internally displaced persons (IDPs). Safety and security concerns might initially decrease migration, as it is unsafe to prepare for migration and individuals may anticipate and hope for an improved security situation, but might increase migration once insecurity or crime levels exceed a certain (personal) threshold. This is in line with studies that find that insecurity is not a driver of migration desires. Individuals migrate due to direct violence but also a broader feeling of insecurity. Numerous studies have confirmed the link between different measures of insecurity in sending countries and emigration at the micro and macro levels, i.e. for individual migrants and bilateral migration flows. War and conflict

might further indirectly drive migration through its effect on infrastructure, economic opportunities, and ultimately livelihoods. While conflict might trigger migration, environmental or political drivers might cause conflict itself (Moore & Shellman 2004; Naudé 2010).

QCA Condition 9A: High levels of physical insecurity and violence

Definition: Extent to which residents fear or experience physical insecurity and violence.

QCA Condition 9B: Increasing physical insecurity and violence

Definition: Extent to which residents perceive physical insecurity and violence as increasing.

Potentially relevant measures

- ▶ *To be added in version 2 of the chapter.*

6.4.10 Environmental degradation and natural disasters

The role of climate change as a predisposing driver of internal and international migration has been studied extensively at the macro and micro levels (Foresight 2011). The majority of studies find that slow-onset changes in temperatures and precipitation are associated with emigration, particularly from more agricultural countries and rural areas. However, if climate change is evaluated alongside economic factors, the latter's effects are often stronger. Further, those most adversely affected might be financially constrained and unable to move internally or internationally, i.e. migration as adaptation strategy is not available to them. Some studies conclude that climate change does not explain migration intentions and behaviour but rather emphasise the indirect effect of climate change on migration through its impact on economic factors, such as incomes, livelihood opportunities, food security, health-related risks, or conflict (Beine & Parsons 2015). While individuals may state to migrate due to economic motivations, the underlying reason is often environmental degradation.

Natural disasters and environmental shocks, on the other hand, refer to fast-onset concrete and identifiable events, such as floods, storms, droughts, and earthquakes that trigger migration. They further include human-made disasters and accidents. Natural disasters may lead to increased internal, particularly rural-to-urban, and international migration. However, they might be secondary to economic drivers, such as employment prospects in cities. While individuals often refer to economic factors, such as wages and market inaccessibility, as reasons for migration, the underlying driving factor, however, is environmental stress. Natural disasters often lead to temporary migration and indirectly affect migration through increasing conflict (Naudé 2010).

QCA Condition 10A: High levels of environmental degradation

Definition: Extent to which residents are detrimentally affected by environmental degradation

QCA Condition 10B: High exposure to natural disasters

Definition: Extent to which residents are exposed to natural disasters and environmental shocks

Potentially relevant measures

- ▶ *To be added in version 2 of the chapter.*

6.4.11 International presence

The effects of globalisation on migration manifest predominantly via trade, foreign direct investment (FDI), and aid or official development assistance (Parsons & Winters 2014). While (neoclassical) economic theory generally holds that trade and migration are substitutes, increased trade in fact seems to increase migration, potentially due to its effect on incomes or cultural linkages between countries (Felbermayr & Toubal 2012). FDI tends to have a negative effect on emigration; however, FDI in the primary sector (e.g. mining, farming) may accelerate emigration while in the secondary sector (e.g. manufacturing) it may rather decrease emigration. Multinational and transnational corporations are other actors that drive migration, particularly of high-skilled labour migrants. Aid, through its effects on incomes and transnational ties, has mostly found to increase emigration (Berthélemy et al. 2009). However, under certain circumstances aid may also decrease emigration, particularly aid for rural development or aid targeted on health and education.

QCA Condition 11A: High level of international presence

Definition: Extent to which international actors and external resources are present and visible in the form of tourism, aid, trade or investment

Potentially relevant measures

- ▶ *To be added in version 2 of the chapter.*

6.4.12 Culture, religion, cohesion, and local attachment

Areas of origin of international migration differ greatly in their social composition and a range of more-or-less elusive aspects of how people lead their lives and interact in society. At one extreme are relatively homogenous, traditionally oriented rural areas where the same families have lived for generations (Gaibazzi 2015, Gardner 1995). At the other extreme are rapidly growing and diverse urban areas where most residents are recent arrivals and many expect to be moving on (Landau 2013). It is not clear how such differences affect migration aspirations.

QCA Condition 12A: Large proportion of long-resident families

Definition: Extent to which residents and their parents are born in the research area.

QCA Condition 12B: High level of mutual trust

Definition: Extent to which residents feel that people in the research area can generally be trusted.

QCA Condition 12C: High levels of conservatism and conformism

Definition: Extent to which residents are socially conservative and conformist.

Potentially relevant measures

- ▶ *To be added in version 2 of the chapter.*

6.4.13 Gender relations

Gender relations affect migration, and are *affected by* migration and subsequent transnational practices (Carling 2005, Kofman and Raghuram 2015). More generally, gender relations are a key aspect of development. In the context of MIGNEX it is relevant to capture the extent to which men and women lead different lives under the influence of different norms. Where such differences exist, they could entail various degrees of inequality in welfare and power.

QCA Condition 13A: High level of gender inequality

Definition: Extent to which men and women lead different lives under the influence of different norms.

Potentially relevant measures

- ▶ *To be added in version 2 of the chapter.*

6.4.14 Development interventions

Development interventions are policy interventions that aim to contribute directly or indirectly to some aspect of development. Examples include Technical and vocational education and training (TVET) programmes, microfinance schemes, or rural electrification. The concept is potentially broad and vague since almost all policy measures have objectives that could be related to ‘development’. In the context of MIGNEX research areas, the concept of development interventions can be narrowed down by two characteristics: (1) they are initiated from ‘outside’ or ‘above’, and (2) are perceptible in people’s lives – if not in terms of outcomes then at least through the activities or changes that they entail.

Development interventions could, obviously, produce development outcomes that in turn affect migration. However, they may also have other direct effects on migration. First the *levels of intervention* could affect residents’ perception of their community and its future. Second, the *perceived effects* of interventions could play similar roles. If residents observe many interventions that, in their view, are failures, they might also lose faith in possibilities for improving their own local futures, and be more inclined to pursue options elsewhere.

QCA Condition 14A: High levels of development intervention

Definition: Extent to which domestic and international development interventions are present in the area and in residents’ awareness.

QCA Condition 14B: Positive assessments of development interventions

Definition: Extent to which residents hold favourable views on the importance and effects of domestic and international development interventions.

Potentially relevant measures

- ▶ *To be added in version 2 of the chapter.*

6.4.15 Local investment

Local development can be stimulated by external interventions, but ultimately also depends on residents’ inclination to invest time, money, and other resources in local futures. A lack of faith

in local opportunities could stimulate migration aspirations. At the same time, however, migration aspirations could potentially undermine local development if residents expect to leave and therefore choose not to invest in local livelihoods, businesses, or assets, such as housing and land. Another scenario is that residents are attracted to migration *because* they want to invest locally and see migration as the best strategy for obtaining the necessary resources.

QCA Condition 15A: High inclination to invest in local businesses or assets

Definition: Extent to which residents have invested, plan to invest, or would be willing to invest in business activities or assets in the research area.

Potentially relevant measures

- ▶ *To be added in version 2 of the chapter.*

6.4.16 Overall perceptions of change

People's perception of how their society and their own situation are *changing over time* might be as important for migration as their assessment of the current state of affairs. Analyses of migration can therefore benefit from incorporating ways of engaging with an uncertain future (Czaika 2015, Kleist and Thorsen 2016, Williams and Baláz 2012). Perceptions of change can broadly be considered in three ways: (1) assessments of how things have changed over a past period, up to the present; (2) expectations of how things will change in the future; and (3) perceptions of the current direction of change.

QCA Condition 16A: Positive assessments of recent local development

Definition: Extent to which residents hold favourable views on how the research area has developed during the past five years.

QCA Condition 16B: Optimistic expectations for the future

Definition: Extent to which resident's expectations for the future are marked by optimism rather than fear.

QCA Condition 16C: Positive perceptions of the general direction of change

Definition: Extent to which residents hold positive views on the general direction of change in their lives and in the research area.

Potentially relevant measures

- ▶ *To be added in version 2 of the chapter.*

6.4.17 In-migration, transit migration and integration

Many areas of origin of international migration are also areas of in-migration (internal as well as international), and possibly transit migration. While transit migration has become a key policy concept, the phenomenon itself remains elusive. 'Transit migrants' are inexistent in the sense that it is only once migrants leave and move on that their stay can be identified as transit. In empirical research with individuals, it is therefore necessary to initially consider

immigrants in general. Prospective transit migrants can be identified based on the migration aspirations of those individuals.

QCA Condition 17A: High levels of immigration

Definition: Extent to which immigrants make up a large part of the resident population.

QCA Condition 17B: High levels of internal in-migration

Definition: Extent to which internal migrants make up a large part of the resident population.

QCA Condition 17B: High proportion of prospective transit migrants among residents

Definition: Extent to which a large proportion of residents are immigrants with aspirations for onward migration.

Potentially relevant measures

- ▶ *To be added in version 2 of the chapter.*

6.4.18 Out-migration

Areas of origin of international migration have the common experience of people leaving, but they differ greatly in the scale, direction, composition, and temporal trends of migration. In analyses of the drivers of migration, it could be most relevant to consider international migration in general, since it may depend on external factors—unrelated to the drivers—where or how far the migrants are able to go. In analyses of the effects of migration, however, it might be specifically migration to high-income countries that has an impact. Internal migration, too, is part of the migration–development nexus, on its own or because of its entanglements with international migration (King and Skeldon 2010).

QCA Condition 18A: High levels of international out-migration

Definition: Extent to which there is a large outflow of international migrants from the research area.

QCA Condition 18B: High levels of international out-migration to high-income countries

Definition: Extent to which there is a large outflow of international migrants from the research area to high-income countries.

QCA Condition 18C: High levels of internal out-migration

Definition: Extent to which there is a large outflow of internal migrants from the research area.

Potentially relevant measures

- ▶ *To be added in version 2 of the chapter.*

6.4.19 Return migration

Some areas of origin of international migration are shaped by substantial return migration (Carling 2004, Hagan and Wassink 2020, van Houte and Davids 2014). The returnees could be returning at the age of retirement after many years of work abroad, they could be former overseas contract workers who may leave again for new contracts, or they could have come back from exile after several years as refugees. In some societies, deportees and other involuntary returnees are also numerous. Returnees can have a greater influence on their communities than their sheer number would suggest, often because of their financial resources or human capital (Bucheli *et al.* 2019). Return migration in the form of deportation can have negative effects on development, especially when deportees are involved in organized crime (Kalsi 2018). While the nature of return migration is decisive for development outcomes, the fundamental aspect of variation across areas of origin is whether international return migration has occurred on a substantial scale.

QCA Condition 19A: Large presence of international return migrants

Definition: Extent to which a large proportion of residents have lived abroad.

Potentially relevant measures

- ▶ *To be added in version 2 of the chapter.*

6.4.20 Migrant transnationalism and remittances

Migrant transnationalism refers to the processes by which migrants and their counterparts in communities of origin forge and sustain links between societies separated by national borders (Basch *et al.* 1994, Carling 2008, Vertovec 2004). These processes are driven by transnational *practices*, such as various kinds of cross-border mobility, communication, and exchanges. In general terms, migrant transnationalism varies in two ways: (1) in the prevalence of cross-border connections—especially between family members—and (2) in the extent to which these connections are conduits for transnational practices (Carling 2007). Sending remittances is a transnational practice of great importance, both in monetary terms and as a proxy for other harder-to-measure commitments (Carling 2020, Yang 2011).

QCA Condition 20A: Widespread transnational ties

Definition: Extent to which a large proportion of residents have family members, relatives, or friends in other countries.

QCA Condition 20B: High intensity of transnational communication

Definition: Extent to which a large proportion of residents have regular communication with family members, relatives, or friends in other countries.

QCA Condition 20C: High importance of remittances

Definition: Extent to which remittance inflows are widespread and important to household income.

Potentially relevant measures

- ▶ *To be added in version 2 of the chapter.*

6.4.21 Culture of migration

A culture of migration emerges with growing and consolidating migrant networks. Migration of some community members changes the attitudes and perceptions towards migration of those that stay behind. Migration becomes engrained in the local culture and a rite of passage. Emigrants are social role models and individuals migrate due to the inability to fill a social role. In a culture of migration, individuals may feel triggered to migrate even if they do not have migrant networks or families and friends at destinations. Migration becomes self-perpetuating and ‘the thing to do.’ A range of studies have confirmed the importance of the culture of migration and individual’s yearning to migrate to conform to cultural norms (Alpes 2012). Individuals often migrate even if they would have greater economic opportunities at home. Those that stay behind are often seen as lazy, losers, to have failed, undesirable as potential mates, and face feelings of shame and embarrassment. Men seem to disproportionately be affected by this cultural shame, as migration is linked to masculinity. Religion is another factor that influences migration norms and might make migration more or less likely.

QCA Condition 21A: Well-established culture of migration

Definition: Extent to which international out-migration is part of everyday life, discourses, experiences and institutions in the research area

QCA Condition 21B: Predominantly favourable views on migration

Definition: Extent to which residents hold favourable views on international out-migration and its effects of communities of origin.

Potentially relevant measures

- ▶ *To be added in version 2 of the chapter.*

6.4.22 Migration aspirations

Aspirations generally refer to a “desire for a better life” and fulfilment of individuals or collective needs. Individuals who migrate to (partly) fulfil their aspirations might actually see their aspirations increase rather than decrease after migration, as they are exposed to new opportunities and lifestyles. Aspirational gaps are usually both cause and consequence of migration (Czaika & Vothknecht 2014). Alternatively, migration might decrease aspirations, as migrants are unable to fulfil their aspirations at the destination. Moreover, attitudes, views, and perceptions about one’s own country and the aspiration to live in another country influence whether and where individuals migrate or intend to do so. Individual characteristics, such as personality traits further affects who migrates or intends to do so. For instance, openness to experience and adventure has consistently been found to drive migration intentions and behaviour. However, their effects are secondary to individual socio-economic and demographic characteristics. Emotions and feelings, often in conjunction with other drivers, also affect migration (Boccagni & Bladassar 2015).

QCA Condition 22A: High prevalence of aspirations for international migration

Definition: Extent to which international migration aspirations are widespread and well-developed

QCA Condition 22B: High prevalence of aspirations for internal migration

Definition: Extent to which internal migration aspirations are widespread and well-developed.

Potentially relevant measures

- ▶ *To be added in version 2 of the chapter.*

6.4.23 Feasibility of migration

Personal and household resources include both material and non-material resources that facilitate or constrain migration (Carling 2002). Resource availability affect whether aspiring migrants actually migrate or not and if so, whether they migrate internally, internationally, where they relocate, and by which mode of migration they go. Relevant resources include past migration experience and relationships with past or current migrants. Individuals who have migrated in the past or who have family members with migration experience are more likely to migrate in the future. While access to resources differentiate between individuals, there are also macro-level differences between areas of origin. There are variations in opportunities for regular migration as well as in the availability of smuggling services that facilitate irregular migration. Low levels of migration ability can be reflected in experiences of failed migration (e.g. deportation) or in refraining from attempting to realize migration aspirations.

QCA Condition 23A: High perceived feasibility of migration

Definition: Extent to which people in the research area see international migration as a realistic option for those who want to pursue it.

Condition 23B: High prevalence of failed migration attempts

Definition: Extent to which experiences of failed migration attempts are widespread.

Potentially relevant measures

- ▶ *To be added in version 2 of the chapter.*

6.4.24 Migration policy

Immigration policies may affect the volume and composition of migration flows in combination with other social dynamics, globalisation and transnationalism, and political systems, even though the empirical literature finds mixed evidence, partly due to difficulties measuring migration policies. However, restrictive migration policies have unintended consequences, such as reducing emigration and circular migration and promoting permanent settlement of irregular migrants, thereby resulting in higher net migration (Czaika & de Haas 2017). The deterrence effect might vary with specific policies: restrictive visa requirements deter irregular entries while restrictive visa practices increase attempts of irregular entry. Perceived generous treatment of migrants and lenient migration policies might increase immigration. Qualitative research has equally found mixed evidence. Migration policies, or

perceptions thereof, make migration more difficult and may deflect some migrants to alternative destinations that are deemed more welcoming or merely change the migration route while they are not important for others.

Many states have introduced emigration policies to influence out-migration of entire populations or of particular gender, skill, regional, ethnic or religious groups. In terms of policy approaches, governments may basically engage in three different policies: they may either encourage or constrain emigration of either all or a particular group of citizens, or they may engage in a laissez-faire policy leaving emigration of its citizen largely unregulated. In MIGNEX we hypothesize that emigration policies operate predominantly in conjunction with other development factors.

Similarly, many states have introduced policies to encourage return of citizens from abroad, and/or to engage with their diaspora. Despite its widespread use, the effectiveness of respective policies, implemented by the home country, to encourage return has rarely been assessed on a broader basis. MIGNEX therefore aims to identify pre-conditions that may causally influence the effect diaspora policies may have in attracting remittances and encouraging return.

Information campaigns are purposive attempts to inform, persuade and motivate behaviour by reaching audiences through organized communication activities. Related to migration, these can include internet-based campaigns, TV and video, radio, the print media, workshops and theatre, hotlines and information centres, as well as word of mouth peer-to-peer network campaigns. The effectiveness of information campaigns - generally aimed at deterring irregular migration - is not clear or very limited (Tjaden et al. 2018). Some evidence suggests that information campaigns have very limited effects on migrants' decisions to leave, as other factors play a more important role. Other studies indicate that migrants underestimate physical and financial risks, overestimating their chances of successfully reaching the destinations and acquiring legal status, and have vague or inaccurate perceptions of what life is like afterwards.

QCA Condition 24A: Restrictive migration policy in major destinations

Definition: Extent to which restrictive immigration policies in major destination countries are obstacles for international migration from the research area

QCA Condition 24B: Prominent information campaigns to discourage irregular migration

Definition: Extent to which residents have been exposed to information campaigns intended to discourage irregular migration.

QCA Condition 24C: Active emigration policy

Definition: Extent to which national or sub-national government engages in active emigration management by either facilitating or constraining emigration

QCA Condition 24D: Active return and diaspora policy

Definition: Extent to which governmental and non-governmental actors engage with their diaspora (e.g. in facilitating remittances or return)

Potentially relevant measures

- ▶ *To be added in version 2 of the chapter.*

6.5 Selection and calibration of conditions and outcomes

6.5.1 Selection of conditions

Analysis of each research question (*MIG1-6* and *DEV1-6*, respectively) requires a separate theoretical rationale and specification of a QCA model involving the selection and justification of a unique set of conditions employed in the respective analysis. The selection of the conditions is therefore driven by theory rather than anything else, even though the number of conditions to be tested in a QCA model depends on the number of available cases and their diversity, i.e. how much variation the cases provide for the analysis of the relations between conditions and the outcome. The selection of conditions requires theoretical understanding of the condition-outcome relationship and substantial background research.

6.5.2 Calibration of outcomes and conditions

After specifying the QCA models by selecting for each (migration/development) outcome the theoretically most relevant conditions out of the pool of (>24) conditions we have collected data for, conditions and outcomes are calibrated by defining the degree of set membership based on raw data that describe condition and outcome characteristics of all cases (research areas). The two basic ways for calibrating raw data are dichotomous or continuous. In crisp-set QCA (csQCA), conditions and outcomes of cases are dichotomous and defined by the 'presence' or 'absence' (i.e. membership) of a given characteristic in a set of cases (see Table 2).

Crisp-set QCA hereby identifies the conditions that are needed or most effective for the outcome to occur (Befani 2016). In fuzzy set QCA (fsQCA), cases can also have partial membership in the sets of conditions X and outcome Y, which allows for more information. As well as being fully in the set or out the set (as in csQCA) cases can be 'more in than out of a set' or 'more out than in a set' (see Table 2). Fuzzy scores are calibrated between 0 (full non-membership) and 1 (full membership) representing the degree of presence of a concept (Schneider & Wagemann 2012). This implies that cases are characterised by their degree of membership in the respective condition set X and outcome set Y.

Table 2. Crisp versus fuzzy calibration

Crisp set	Four-value fuzzy set	Six-value fuzzy set	Continuous fuzzy set
1 = fully in the set	1 = fully in the set	1 = fully in the set	1 = fully in the set
		0.8 = mostly, but not fully in the set	More in than out of the set: $0.5 < X_i < 1$
	0.67 = more in than out of the set	0.6 = more or less in the set	
			0.5 = neither in nor out of the set
	0.33 = more out than in the set	0.4 = more or less out the set	More out than in the set: $0 < X_i < 0.5$
		0.2 = mostly, but not fully out of the set	
0 = fully out of the set	0 = fully out of the set	0 = fully out of the set	0 = fully out of the set

As all outcomes and conditions are calibrated as composites using raw data on several measures, we will re-calibrate each measure by assigning fuzzy scores depending on set membership. After ‘fuzzifying’ all measures, ‘aggregate’ fuzzy scores for outcomes and conditions will be formed. The exact calibration method will be reported in the upcoming analytical background papers.

6.6 Conclusion

This chapter has provided an introductory overview on the key ingredients of the upcoming QCA analyses of the MIGNEX project. We have outlined the 24 themes and their operationalisation in terms of theme-specific conditions. Future versions of this chapter will include details on the specification and calibration of each condition.

References

- Alpes, M. J. (2012). Bushfalling at all cost: the economy of migratory knowledge in Anglophone Cameroon. *African Diaspora*, 5(1), 90-115.
- Awases, M., Gbary, A., Nyoni, J., & Chatora, R. (2004). Migration of health professionals in six countries: a synthesis report. *World Health Organization*, 65, 38-42.
- Basch, L., Glick-Schiller, N. and Szanton Blanc, C. (1994) *Nations Unbound: Transnational Projects, Postcolonial Predicaments, and Deterritorialized Nation-States*. Amsterdam: Gordon & Breach Science Publishers.
- Befani, B. (2016). Pathways to change: Evaluating development interventions with Qualitative Comparative Analysis (QCA). Stockholm: Expertgruppen för biståndsanalys (the Expert Group for Development Analysis). <http://eba.se/en/pathways-to-change-evaluating-development-interventions-with-qualitative-comparative-analysis-qca>.
- Beine, M., Noël, R., & Ragot, L. (2014). Determinants of the international mobility of students. *Economics of Education review*, 41, 40-54.
- Berthélemy, J. C., Beuran, M., & Maurel, M. (2009). Aid and migration: Substitutes or complements?. *World Development*, 37(10), 1589-1599.
- Boccagni, P., & Baldassar, L. (2015). Emotions on the move: Mapping the emergent field of emotion and migration. *Emotion, Space and Society*, 16, 73-80.
- Borjas, G. J. (1999). Immigration and welfare magnets. *Journal of labor economics*, 17(4), 607-637.

- Bucheli, J.R., Fontenla, M. and Waddell, B.J. (2019) 'Return migration and violence.' *World Development*, 116:113-124.
- Campaniello, N. (2014). The causal effect of trade on migration: Evidence from countries of the Euro-Mediterranean partnership. *Labour Economics*, 30, 223-233.
- Carling, J. (2002) 'Migration in the age of involuntary immobility: theoretical reflections and Cape Verdean experiences.' *Journal of Ethnic and Migration Studies*, 28(1):5-42.
- Carling, J. (2004) 'Emigration, return and development in Cape Verde: the impact of closing borders.' *Population, Space and Place*, 10(2):113-132.
- Carling, J. (2005) 'Gender dimensions of international migration.'
- Carling, J. (2007) *Transnationalism in the context of restrictive immigration policy*, PhD dissertation, Oslo: Department of Sociology and Human Geography, University of Oslo.
- Carling, J. (2008) 'The human dynamics of migrant transnationalism.' *Ethnic and Racial Studies*, 31(8):1452-1477.
- Carling, J. (2020) 'Remittances: eight analytical perspectives.' in Bastia, T. and Skeldon, R. (eds) *Routledge Handbook of Migration and Development*. Abingdon: Routledge, 114-124.
- Carling, J., Paasche, E. and Siegel, M. (2015) 'Finding Connections: The Nexus between Migration and Corruption.' Posted. Migration Policy Institute.
- Czaika, M. (2013). Are unequal societies more migratory?. *Comparative Migration Studies*, 1(1), 97-122.
- Czaika, M. (2015) 'Migration and Economic Prospects.' *Journal of Ethnic and Migration Studies*, 41(1):58-82.
- Czaika, M., & De Haas, H. (2012). The role of internal and international relative deprivation in global migration. *Oxford Development Studies*, 40(4), 423-442.
- Czaika, M., & de Haas, H. (2017). The effect of visas on migration processes. *International Migration Review*, 51(4), 893-926.
- Czaika, M., & C. Reinprecht (2020). Drivers of Migration. A synthesis of knowledge. *IMI working paper No. 163*, University of Amsterdam
- Czaika, M., & Vothknecht, M. (2014). Migration and aspirations—are migrants trapped on a hedonic treadmill?. *IZA Journal of migration*, 3(1), <https://doi.org/10.1186/2193-9039-3-1>
- Dimant, E., Krieger, T. and Meierrieks, D. (2013) 'The effect of corruption on migration, 1985-2000.' *Applied Economics Letters*, 20(13):1270-1274.
- Dustmann, C., & Okatenko, A. (2014). Out-migration, wealth constraints, and the quality of local amenities. *Journal of Development Economics*, 110, 52-63.
- Felbermayr, G. J., & Toubal, F. (2012). Revisiting the trade-migration nexus: Evidence from new OECD data. *World Development*, 40(5), 928-937.
- Foresight, U. K. (2011). Migration and global environmental change: Future challenges and opportunities. *UK Government Office for Science*.
- Gaibazzi, P. (2015) *Bush Bound: young men and rural permanence in migrant West Africa*. New York: Berghahn.
- Gardner, K. (1995) *Global Migrants Local Lives: Travel and Transformation in Rural Bangladesh*. New York: Oxford University Press.
- Hagan, J.M. and Wassink, J.T. (2020) 'Return Migration Around the World: An Integrated Agenda for Future Research.' *Annual Review of Sociology*, 46(1).
- Hagen-Zanker, J., & Mallett, R. (2016). Journeys to Europe. *The Role of Policy in Migrant Decision-Making ODI Insights*.
- Harris, J. R., & Todaro, M. P. (1970). Migration, unemployment and development: a two-sector analysis. *The American economic review*, 60(1), 126-142.
- Kalsi, P. (2018) 'The impact of U.S. deportation of criminals on gang development and education in El Salvador.' *Journal of Development Economics*, 135:433-448.
- King, R. and Skeldon, R. (2010) "Mind the Gap!" Integrating Approaches to Internal and International Migration.' *Journal of Ethnic and Migration Studies*, 36(10):1619-1646.
- Kleist, N. and Thorsen, D., eds (2016) *Hope and uncertainty in contemporary African migration*. New York: Routledge.
- Kofman, E. and Raghuram, P. (2015) *Gendered Migrations and Global Social Reproduction*. Basingstoke: Palgrave.
- Landau, L.B. (2013) 'Mobility, Belonging, and Governance in Africa's Urban Estuaries.' *The Brown Journal of World Affairs*, 20(1):107-121.
- Moore, W. H., & Shellman, S. M. (2004). Fear of persecution: Forced migration, 1952-1995. *Journal of Conflict Resolution*, 48(5), 723-745.

- Naudé, W. (2010). The determinants of migration from Sub-Saharan African countries. *Journal of African Economies*, 19(3), 330-356.
- Parsons, C. R., & Winters, L. A. (2014). International migration, trade and aid: a survey. In *International handbook on migration and economic development*. Edward Elgar Publishing.
- Ragin, C. C. (1987). *The comparative method: moving beyond qualitative and quantitative strategies*. University of California Press
- Schneider, C. Q., & Wagemann, C. (2012). *Set-theoretic methods for the social sciences: A guide to qualitative comparative analysis*. Cambridge University Press.
- Skeldon, R. (2002). Migration and poverty. *Asia Pacific Population Journal*, 17(4), 67-82.
- Tjaden, J., Morgenstern, S., & Laczko, F. (2018). Evaluating the impact of information campaigns in the field of migration: A systematic review of the evidence, and practical guidance. *Central Mediterranean Route Thematic Report Series*.
- van Houte, M. and Davids, T. (2014) 'Moving back or moving forward? Return migration, development and peace-building.' *New Diversities*, 16(2):71-87.
- Vertovec, S. (2004) 'Migrant transnationalism and modes of transformation.' *International Migration Review*, 38(3):970-1001.
- Williams, A.M. and Baláž, V. (2012) 'Migration, Risk, and Uncertainty: Theoretical Perspectives.' *Population Space and Place*, 18(2):167-180.
- Yang, D. (2011) 'Migrant Remittances.' *Journal of Economic Perspectives*, 25(3):129-152.

Annex 1. Presumed specific developments

Table A1. Distribution of presumed specific developments across research areas

ID	Specific developments rearranged in logical order. Red = negative, Blue = positive	Negative				Positive				Balance with respect to livelihoods			
		3: Major livelihood collapse	9: Protracted stagnation	1: Severe environmental problems	5: Severe deterioration of security	2: Major livelihood expansion	6: Major social protection reform	7: Major educational expansion	8: Major infrastructure improvement	4: Sustained improvement of security	Collapse (3) and/or stagnation (9)	Expansion (2)	Neither
AFG-A	Behsood					X	X					X	
AFG-C	Bagrami					X		X				X	
AFG-D	Zindajan		X								X		
CPV-B	Boa Vista					X			X			X	
CPV-C	São Nicolau		X								X		
ETH-A	Qwiha					X			X			X	
ETH-B	Ziway			X		X						X	
ETH-G	Moyale		X								X		
GHA-A	Golf City					X		X	X			X	
GHA-C	New Takoradi	X		X							X		
GHA-D	Gbane			X		X						X	
GIN-A	Boffa	X		X							X		
GIN-C	Dialakoro		X								X		
NGA-A	Down Quarters					X			X			X	
NGA-C	Awe						X						X
NGA-F	Ekpoma							X					X
PAK-A	Gwadar					X			X	X		X	
PAK-B	Keti Bandar	X	X	X							X		
PAK-F	Chot Dheeran		X								X		
SOM-B	Baidoa					X			X			X	
SOM-E	Erigavo	X		X							X		
TUN-B	Enfidha					X			X			X	
TUN-G	Al Rudayyif	X	X								X		
TUR-B	Kilis	X					X	X			X		
TUR-D	Artvin			X		X		X	X			X	
TUR-F	Çanakkale	X		X				X			X		

Annex 2. Overview of QCA conditions

Table A2. Overview of QCA conditions

	QCA Condition	Definition
Livelihoods and economic opportunities	1A. Abundant livelihood opportunities	Extent to which the local area offers ample employment, business or other livelihood opportunities
	1B. Expanding livelihood opportunities	Extent to which the local employment, business or other livelihood opportunities are (perceived to be) expanding
Well-being and standard of living	2A. High level of well-being and standard of living	Extent to which residents experience a high level of well-being and standard of living
	2B. High level of poverty and inequality	Extent to which residents experience high level of poverty and socio-economic inequality
Health: access and quality	3A. High levels of access and quality in health care services	Extent to which residents have access to health care services and regard them to be of high quality.
	3B. Prevalence of good health	Extent to which residents and their families are in good health.
Education: access and quality	4A. High levels of access and quality in education	Extent to which residents have access to education and regard it to be of high quality.
	4A. High levels of educational attainment	Extent to which residents have high levels of educational attainment.
Social protection	5A. High level of social protection	Extent to which residents have access to social protection.
Infrastructure and utilities	6A. High levels of access to public infrastructure and utilities	Extent to which residents have access to basic public infrastructure and utilities.
Governance and institutions	7A. High quality of governance and institutions	Extent to which residents experience high-quality governance and low levels of corruption
Civic participation	8A. High level of civil rights and participation	Extent to which residents enjoys civil rights and actively engage in democratic life.
Insecurity and violence	9A. High levels of physical insecurity and violence	Extent to which residents fear or experience physical insecurity and violence.
	9B. Increasing physical insecurity and violence	Extent to which residents perceive physical insecurity and violence as increasing.
Environmental degradation and natural disasters	10A. High levels of environmental degradation	Extent to which residents are detrimentally affected by environmental degradation
	10B. High exposure to natural disasters	Extent to which residents are exposed to natural disasters and environmental shocks
International connectedness	11A. High level of international presence	Extent to which international actors and external resources are present and visible in the form of tourism, aid or investment
Culture, cohesion, and local attachment	12A. Large proportion of long-resident families	Extent to which residents and their parents are born in the research area.
	12B. High level of mutual trust	Extent to which residents feel that people in the research area can generally be trusted.

	QCA Condition	Definition
	12C. High levels of conservatism and conformism	Extent to which residents are socially conservative and conformist.
Gender relations	13A. High level of gender inequality	Extent to which men and women lead different lives under the influence of different norms.
Development interventions	14A. High levels of development intervention	Extent to which domestic and international development interventions are present in the area and in residents' awareness.
	14B. Positive assessments of development interventions	Extent to which residents hold favourable views on the importance and effects of domestic and international development interventions.
Local investment	15. High inclination to invest in local business	Extent to which residents have invested, plan to invest, or would be willing to invest in business activities in the research area.
Overall perceptions of change	16A. Positive assessments of recent development	Extent to which residents hold favourable views on how the research area has developed during the past five years.
	16B. Optimistic expectations for the future	Extent to which resident's expectations for the future are marked by optimism rather than fear.
	16C. Positive perceptions of change	Extent to which residents hold positive views on the general direction of change in their lives and in the research area.
In-migration, transit migration and integration	17A. High levels of immigration	Extent to which immigrants make up a large part of the resident population.
	17B. High levels of internal in-migration	Extent to which internal migrants make up a large part of the resident population.
Out-migration	18A. High levels of international out-migration	Extent to which there is a large outflow of international migrants from the research area
	18A. High levels of internal out-migration	Extent to which there is a large outflow of internal migrants from the research area
Return migration	19A. Large present of international return migrants	Extent to which a large proportion of residents have lived abroad.
Migrant transnationalism and remittances	20A. Widespread transnational ties	Extent to which a large proportion of residents have family members, relatives, or friends in other countries.
	20B. High intensity of transnational communication	Extent to which a large proportion of residents have regular communication with family members, relatives or friends in other countries.
	20C. High importance of remittances	Extent to which remittance inflows are widespread and important to household income.
Culture of migration	21A. Well-established culture of migration	Extent to which international out-migration is part of everyday life, discourses, experiences and institutions in the research area
	21B. Predominantly favourable views on migration	Extent to which residents hold favourable views on international out-migration and its effects of communities of origin.
Migration aspirations	22A. High prevalence of international migration aspirations	Extent to which international migration aspirations are widespread and well-developed

	QCA Condition	Definition
	22B. High prevalence of internal migration aspirations	Extent to which internal migration aspirations are widespread and well-developed.
Feasibility of migration	23A. High perceived feasibility of migration	Extent to which people in the research area see international migration as a realistic option for those who want to pursue it.
	23B. High prevalence of failed migration attempts	Extent to which experiences of failed migration attempts are widespread.
Migration policy	24A. Restrictive migration policy at major destinations	Extent to which restrictive immigration policies in major destination countries are obstacles for international migration from the research area
	24B. Prominent information campaigns to discourage irregular migration	Extent to which residents have been exposed to information campaigns intended to discourage irregular migration.
	24B. Active emigration policy	Extent to which national or sub-national government engages in active emigration management by either facilitating or constraining emigration
	24C. Active return and diaspora policy	Extent to which governmental and non-governmental actors engage with diaspora in facilitating remittances or return