The Global Migration Group (GMG) has produced this publication in order to provide guidance to producers and users of international migration data.

Handbook for Improving the Production and Use of Migration Data for Development

GLOBAL MIGRATION GROUP (GMG)

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Swiss Agency for Development and Cooperation SDC





This is a product of the Global Knowledge Partnership on Migration and Development (KNOMAD). A global hub of knowledge and policy expertise on migration and development, KNOMAD aims to create and synthesize multidisciplinary knowledge and evidence; generate a menu of policy options for migration policy makers; and provide technical assistance and capacity building for pilot projects, evaluation of policies, and data collection. KNOMAD is supported by a multi-donor trust fund established by the World Bank. Germany's Federal Ministry of Economic Cooperation and Development; Sweden's Ministry of Justice, Migration and Asylum Policy; and the Swiss Agency for Development and Cooperation are the contributors to the trust fund. The views expressed in this book do not represent the views of the World Bank or the sponsoring organizations. All queries should be addressed to KNOMAD@worldbank.org. KNOMAD working papers and a host of other resources on migration are available at www.KNOMAD.org.

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Foreword

Why This Guide?

The Global Migration Group (GMG) has produced this publication to provide quidance to producers and users of international migration data. This project has been conducted within the framework of the World Bank's KNOMAD initiative. Its publication follows the adoption by the United Nations General Assembly of the 2030 Agenda for Sustainable Development and the development of an accompanying indicator framework. The handbook is intended to support Member States in the collection, tabulation, analysis, dissemination, and use of migration data, and is thus expected to contribute directly to monitoring the implementation of the Sustainable Development Goals (SDGs). By assisting countries in collecting accurate, up-to-date, and relevant data on the stocks, flows, and contributions of migrants and migration to development, it is hoped that the guide will facilitate the integration of migration into national development planning and strategies. This publication includes contributions from 16 members of GMG. As a tool for capacity development at the country level, the guide shall form part of a comprehensive strategy to strengthen the production and use of migration data for development, particularly in developing countries.

The Challenge: Improving Migration Data

For many years, GMG agencies have undertaken efforts to improve the availability, quality, and comparability of migration data by publishing guidelines for their compilation, and collecting and disseminating migration statistics. (Examples include the 1998 United Nations Recommendations on International Migration Statistics, and the 2007 International Organization for Migration (IOM) guide, "Sharing Data: Where to Start.") This guide is an effort to facilitate the implementation of these and other relevant standards and guidelines for the collection of migration statistics, rather than producing new standards. By taking primarily a user perspective, the handbook seeks to provide guidance and assistance in operationalizing existing statistical definitions

The paucity of international migration data has long been recognized. The 2006 High-Level Dialogue on International Migration and Development, with its emphasis on leveraging the benefits of international migration for development and addressing its negative consequences, highlighted the absence of globally comparable data on the impact of international migration on countries of origin, transit, and destination. The Declaration of the 2013 High-Level Dialogue on International

Migration and Development emphasized "the need for reliable statistical data on international migration, including when possible on the contributions of migrants to development in both origin and destination countries." Further, the Declaration noted that migration data "could facilitate the design of evidence-based policy and decision making in all relevant aspects of sustainable development." Other resolutions of the United Nations General Assembly and the Economic and Social Council have also called for improvements in the production of accurate, relevant, and timely international migration statistics, disaggregated by gender, age, and other relevant characteristics. The Global Forum on Migration and Development, since it first met in 2007, has also repeatedly emphasized the need for accurate, policy-relevant, and timely data on migration and its impacts on economic, social, and sustainable development in countries of origin, destination, and transit. Indeed, the lack of evidence on the development impacts of migration has hindered efforts, especially in developing countries, to integrate migration into national development plans and strategies, and track the contribution of migration to the implementation of the Millennium Development Goals and other internationally agreed development goals.

SDGs: Integrating Migration into the United Nations Development Agenda

The inclusion of migration in the 2030 Agenda for Sustainable Development has far-reaching implications for the collection of migration data. Improving migration statistics, once the exclusive domain of statisticians, has now become a priority for policy makers and planners at the national, regional, and global levels. The SDGs include one migration-specific target (10.7), which calls on countries to "facilitate orderly, safe, regular and responsible migration and mobility of people, including through implementation of well-planned migration policies." In addition, there are several migration-related targets, including target 3c (retention of health workers in developing countries), target 4b (provision of scholarships for study abroad), targets 5.2, 8.7, and 16.2 (combating human trafficking), target 8.8 (respecting labor standards for migrant workers), target 10c (lowering the costs of transmitting remittances), and target 17.18 (disaggregating data by migratory status). A third group of targets are those that, although they do not refer to migration per se, nevertheless have an impact on migration or migrants, not least due to the target to disaggregate data by migratory status. Examples include targets that relate to poverty reduction, education, health, and peaceful societies.

The commitment of the 2030 Agenda to "leave no one behind" has significant implications for data collection: policy makers and statisticians will no longer be able to "hide behind averages." The ambition of the 2030 Agenda is that through disaggregation by migratory status, policy makers, civil society, and the general public are able to monitor the outcomes of the SDGs and targets for migrants and non-migrants, thus allowing for assessment of the relative success of national

development policies. By April 2016, the United Nations Statistical Commission was expected to adopt the indicator framework for the SDGs, as developed by the Inter-Agency and Expert Group on Sustainable Development Goals. Following the endorsement of this indicator framework by the United Nations Economic and Social Council and the General Assembly, there may be a need to revise or update this handbook.

Nontraditional Data Sources: The Data Revolution

This handbook is especially timely given the growing calls for a "development data revolution," which have accompanied the formulation of the SDGs. Many argue that it will not be possible to meet the demand for data that is required to measure progress toward the new development goals, targets, and indicators unless the quality, availability, and timeliness of data improve markedly. In 2013, the High-Level Panel of Eminent Persons on the post-2015 development agenda first called for a "development data revolution." Subsequently, in 2014, the United Nations Secretary General's Independent Expert Advisory Group on a "Data Revolution for Sustainable Development" published the report "A World That Counts: Mobilizing the Data Revolution for Sustainable Development." The report calls for more diverse, integrated, timely, and trustworthy information on development. The report also laments that entire groups of people are not being counted, and that important aspects of people's lives are not measured. The report recommends a "significant increase in funds to support this data revolution, following an assessment of capacity development needs."

Aims of This Guide

One of the key objectives identified in the multi-annual workplan of the GMG is to provide guidance and support to Member States in collecting and analyzing data on migration and development. The aim of this publication is to provide practical guidance to policy makers and practitioners on the measurement of international migration and its impact on development, and to present good practices and lessons learned from recent initiatives undertaken by GMG members. Over recent years, GMG entities have undertaken a broad range of initiatives to help countries around the world to improve data on migration, remittances, and development. The aim of this handbook is to make this information more accessible by producing a synthesis of the work that has been conducted by various GMG entities.

The handbook summarizes existing standards and definitions for the collection and dissemination of migration statistics. It provides an overview of the main sources for migration statistics, and includes an inventory of the availability of data. It showcases the main international data sets on international migrants and international migration, and indicates how they can be used for policy making. The guide provides examples of good practices for the collection of migration

data and their use in policy making. It assesses the progress that has been made in implementing global standards and guidelines on migration statistics, and identifies the remaining gaps and challenges. The guide concludes by summarizing key recommendations that countries may wish to follow when producing and using migration data for development.

Scope and Outline of the Guide

Although it is unlikely that one single handbook can cover all the possible data needs at the national, regional, and global levels, it is hoped that this guide will nevertheless address the minimum data requirements for a wide range of policy areas.

The guide is divided into four parts. The first part provides an overview of the main criteria for measuring international migration, as well as the main sources for migration data, including traditional and nontraditional sources. The second part focuses on the importance of data in relation to some of the reasons for migration. There are examples of some elements of often complex influences on migratory movements and related decision-making processes. Here, data sources are presented from the perspective of work (labor migration), study (migration for educational purposes), and asylum (the arrival of refugees and asylum-seekers). The third part discusses migration data from the perspective of some key development outcomes, including remittances, labor market, trade, intellectual property, health, education, and the environment. The fourth part provides guidance on the collection and use of migration data for the purpose of improving the enjoyment of human rights for migrants, by focusing on the human rights of migrants, migrant women, migrant girls, and victims of human trafficking.

In total, the four parts contain 17 concise chapters, using a common framework. Each chapter provides a brief overview of the key policy issues. This is followed by a section describing the main data that are needed to analyze these policies. The next section comprises an overview of existing sources and standards for data collection. The following section discusses data gaps and challenges. Then, each chapter provides some tools and good practices to address these gaps. Finally, each chapter concludes with a set of recommendations and key messages.

Using This Guide

It is the hope of the authors that this guide will be used and tested in the field as part of capacity development activities. Relevant sections of this handbook could be used as background reading for participants in regional and national workshops. Reference lists for each chapter provide guidance to further reading, and annex A includes online links to examples of good practice, training materials and handbooks, and further guidance on international standards. The handbook may inspire the development of specific online or offline training modules, tools, and

exercises. United Nations entities that have not yet contributed to the handbook may wish to add a section. There may thus be a need to update, revise, or extend the handbook in due course.

David M. Malone

Chair of the Global Migration Group (GMG)

Dilip Ratha

Head of KNOMAD

This Foreword was prepared by Frank Laczko, Director of the International Organization for Migration's Global Migration Data Analysis Centre (IOM's GMDAC), Bela Hovy, Chief of Migration Section, Population Division, United Nations' Department of Economic and Social Affairs and Ann Singleton, School for Policy Studies, University of Bristol.

The Global Knowledge Partnership on Migration and Development (KNOMAD) is a global hub of knowledge and policy expertise on migration and development issues. KNOMAD draws on experts from all parts of the world to synthesize existing knowledge and generate new knowledge for use by policy makers in sending and receiving countries. KNOMAD works in close coordination with the Global Forum on Migration and Development and the GMG. The World Bank has established a multi-donor trust fund to implement KNOMAD. The Swiss Agency for Development and Cooperation and Germany's Federal Ministry of Economic Cooperation and Development are the largest contributors to the trust fund. Within the World Bank, KNOMAD is located in the Development Prospects Group of the Development Economics Vice-Presidency. KNOMAD is led by Dilip Ratha.

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Bela Hovy, Chief of Migration Section, Population Division, United Nations' Department of Economic and Social Affairs

Editor: Ann Singleton, Senior Research Fellow, School for Policy Studies, University of Bristol

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Abbreviations and Acronyms

AML-CFT Anti-Money Laundering and Counter Financing of Terrorism

BPM6 Sixth Edition of the IMF's Balance of Payments and International

Investment Position Manual

CDC U.S. Centers for Disease Control and Prevention

CDR call detail records

CEDAW Convention on the Elimination of All Forms of Discrimination

Against Women

CMW Committee on Migrant Workers

CRC Committee on the Rights of the Child

DTM Displacement Tracking Matrix

EBOPS Extended Balance of Payments Services Classification

EPO European Patent Office

Eurostat European Union Statistical Office

FATS Foreign Affiliates Statistics
FDI foreign direct investment

FRA European Agency for Fundamental Rights
GATS General Agreement on Trade in Services

GDP gross domestic product

GEM Global Education Monitoring

GMDAC Global Migration Data Analysis Centre, International Organization

for Migration

GMG Global Migration Group

ICLS International Conference of Labour Statisticians

ILO International Labour Organization

ILOSTAT ILOSTAT database

IMF International Monetary Fund

IOM International Organization for Migration

IP Internet Protocol

IPCC Intergovernmental Panel on Climate Change

ISCO International Standard Classification of Occupations

ISIC International Standard Classification of All Economic Activities

ITU International Telecommunication Union

KNOMAD Global Knowledge Partnership on Migration and Development

KYC Know Your Customer

LDC least developed countries

LFS Labor Force Survey

LLECE Latin American Laboratory for Assessment of the Quality of

Education

MIPEX Migrant Integration Policy Index
MMP Mexican Migration Project

MSITS Manual on Statistics of International Trade

NGO nongovernmental organization

OECD Organisation for Economic Co-operation and Development

OHCHR Office of the United Nations High Commissioner for Human Rights

PASEC Program for the Analysis of Education Systems

PCT Patent Cooperation Treaty

PIAAC Programme for International Assessment of Adult Competencies

PISA Programme for International Student Assessment

RPW Remittance Prices Worldwide

RSIM Recommendations on Statistics of International Migration

SACMEQ Southern and Eastern Consortium for Monitoring Educational

Quality

SDG Sustainable Development Goal

SISCOSERV Integrated System of Foreign Trade in Services and Intangibles

TVET technical and vocational education and training

UAV unmanned aerial vehicles
UIS UNESCO Institute for Statistics

UN United Nations

UN Women United Nations Entity for Gender Equality and the Empowerment

of Women

UNCTAD United Nations Conference on Trade and Development
 UNDESA United Nations Department of Economic and Social Affairs
 UNESCO United Nations Educational, Scientific and Cultural Organization

UNFPA United Nations Population Fund

UNHCR United Nations High Commissioner for Refugees

UNICEF United Nations Children's Fund

UNODC United Nations Office on Drugs and Crime

WHO World Health Organization

WIPO World Intellectual Property Organization

WRL world reference levels
WTO World Trade Organization

Part 1 Key Concepts, Definitions, and Sources

This part aims to guide data providers and users by setting out the core concepts and definitions and criteria that are essential for migration data (chapter 1), and the main types of traditional sources of data (chapter 2). Chapter 3 provides a discussion of the potential of innovative sources of data.

The first step toward creating comparable international migration statistics is the consistent implementation of common terms and definitions. However, consistency and comparability are often not achieved because differing national practices and legal definitions mean that data are collected according to different categories. Even within countries, data comparability issues exist, as many systems from which migration data are derived are set up to respond to specific administrative objectives, not specifically for the accurate measurement of international migration. Thus, tackling these challenges by adhering to internationally agreed definitions is necessary to improve migration data at the national, regional, and global levels.

Chapter 1

Key Concepts and Definitions: Essential Criteria for Migration

United Nations Economic Commission for Europe and United Nations Statistics Division¹

Core Concept: International Migrant

Since 1953, the United Nations has issued a series of Recommendations on International Migration Statistics to support efforts to achieve comparability. The most recent are the United Nations Recommendations on Statistics of International Migration, Revision 1 (hereafter, "the Recommendations").²

The Recommendations have dedicated a significant amount of discussion to the harmonization of the concept and definition of an international migrant for statistical purposes.

The definition of an international migrant that is used for statistical purposes is

"[A] long-term migrant is a person who moves to a country other than that of his or her usual residence for a period of at least a year (12 months), so that the country of destination effectively becomes his or her new country of usual residence."

The Recommendations include the concept of country of usual residence. Therefore, an immigrant must not have been a usual resident, and will establish usual residence in the country he or she has entered. An emigrant should have been a usual resident of the country from which he or she is departing, and is establishing usual residence in another country. Use of this definition allows for the collection of internationally comparable data on international migration.

¹ This chapter was prepared by Jason Schachter, United Nations Economic Commission for Europe, Keiko Osaki Tomita and Haoyi Chen of the United Nations Statistical Division and Ann Singleton, University of Bristol.

² United Nations (1998) Recommendations on Statistics of International Migration, Rev. 1, United Nations, New York, 1998. Sales No. E.98.XVII.14, Para. 32.

Wherever possible, national data systems should adopt this definition, and it should not be confused with the various administrative or legal definitions used in each country.

BOX 1.1 Summary of the Definitions Set Out in the United Nations Recommendations

Key Concepts and Definitions

International migrant: any person who changes his or her country of usual residence.

Usual residence: the place at which the person has lived continuously for most of the past 12 months (that is, for at least six months and one day) or for at least the past 12 months, not including temporary absences for holidays or work assignments, or intends to live for at least six months.

Stock: the total number of international migrants present in a given country at a particular point in time.

Flow: international migrant flow refers to the number of migrants entering or leaving a given country during a given period, usually one calendar year.

Difference between Migration Stocks and Flows

"Stocks" refers to total migrants present in a given country. "Flows" refers to movement (of migrants entering and those leaving a country in a given year).

Types of Stocks

Immigrant stocks: among usual residents of the country, all native-born persons, whether citizens or foreigners, who emigrated and returned thereafter, plus all foreign-born persons, including citizens born abroad who immigrated, together constitute the totality of immigrant stock.

Stock of foreign-born persons: refers to the stock of population born abroad. They were not part of the country at the beginning of their lives.

Stock of foreigners: the stock of population who do not have citizenship of the country of enumeration. Stock of foreigners is also widely used in countries to represent the stock of immigrants. Whereas by definition virtually all foreign-born persons qualify as immigrants, many foreigners are not.

Stock of returned migrants: citizens of the country of enumeration who emigrated and subsequently came back to live in the country.

Stock of citizens living abroad: citizens who are not usual residents of the country in which they have citizenship.

Key Inflows and Outflows Based on Usual Residence and Citizenship

Immigrating citizens: citizens who are returning after having been abroad for at least 12 months, as well as foreign-born citizens entering for the first time.

Immigrating foreigners: nonresident foreigners entering the country. They are usually subject to the most administrative control in the country receiving them.

Emigrating citizens: citizen residents leaving the country. It is important to note the purpose of leaving.

Emigrating foreigners: foreigners leaving the country of their usual residence.

Key Associated Concepts and Definitions for the Measurement of Migration

Migration, internal and international, is often studied by looking at its size, the characteristics of migrants, the direction of movement, and the impact migration has on migrants themselves and host and origin societies. At its most basic level, migration consists of two primary units of analysis, the person (who moves) and geography (where the person moved from and where the person moved to). There is no single legal definition of a migrant, so migrants are normally defined as persons who have changed their place of usual residence, according to the United Nations Handbook on Measuring International Migration through Population Censuses (UN Statistics Division 2017) or persons who live outside the country of which they are a citizen or national (OHCHR 2014). For the purposes of international migration, a person's country of usual residence is that in which a person lives, that is, the country in which the person has a place to live where the person normally spends the daily period of rest (UN 2016).

Migration Stocks and Flows

Statistics on the size of the migrant population are normally collected on the basis of stocks and flows of international migrants. Simply put, the stock of international migrants is the total number of international migrants living in a country at a particular point in time, while the flow of international migrants is the number of migrants entering or leaving a country over the course of a specific period (for example, one year). Country of birth and citizenship are the main criteria used for categorizing different types of population stocks and flows, with duration of stay providing a further element for statistics on migration flows.

Measurement of Migrant Stock

According to the Recommendations, a country's stock of international migrant population can be measured as all persons who have that country as their country of usual residence (see box 1.1 for the definition of usual residence) and who are citizens of another country (foreign population), or whose place of birth is located in another country (foreign-born population). Thus, the *foreign born* are persons who were born in a country other than the country of enumeration where they currently reside. This group corresponds to the stock of international migrants who migrated at least once in their life and reside outside their country of birth. Persons born in the country are defined as *native born*. Together, the concepts of the foreign-born and native-born population are referred to as nativity status. Regarding measurement of the foreign born, national boundaries at the time of data collection should be used.

Foreigners are the group of persons who do not have citizenship of the country in which they reside. Foreigners can be foreign born or native born. Persons having citizenship of the country of residence are defined as *citizens*, and can also be foreign born or native born. Persons who do not have the citizenship of any country are referred to as stateless. Together, the concepts of citizens and foreigners are referred to as citizenship status.

Both concepts for measuring migration have advantages and disadvantages. The advantage of using the criterion of citizenship status to measure migration is its policy relevance and wide availability across countries. The disadvantages of using citizenship to measure migration are that citizenship can change over time; persons can have citizenship of more than one country, or, being a stateless person, may not have any citizenship; and foreigners are not necessarily international migrants.

The advantage of using country of birth as a measure is that, except for cases when country borders have been redrawn, the country of birth does not change. Further, it is an objective measure, although some countries use the measurement of the mother's place of usual residence at time of birth, rather than actual place of birth, and it directly measures whether a change of residence has taken place over one's lifetime. As with the citizenship method, the information on foreign born populations is widely available across countries. However, a disadvantage is that where a country's borders change over time, persons who have never made an international move may be misclassified as international migrants. Assessing the proportion of foreign born within a population can be complicated by people who previously moved within a country (and who were not considered foreign born at the time of the move) but are later considered foreign born when borders change. One such example would be Ukraine-born people who moved within the USSR later being counted as foreign born after the collapse of the USSR. This would lead to problems when comparing the proportion of foreign born over time within the Russian Federation.

Given the relative strengths and weaknesses of each indicator, the United Nations recommends that countries collect information on country of citizenship and country of birth.

On the basis of nativity and citizenship status, the following typology can be identified:

- Foreign-born foreigners: persons born abroad without the citizenship of the country of residence. This group will in large part be formed by foreign-born immigrants who did not acquire citizenship of the host country.
- Native-born foreigners: persons born in the country of residence without having the citizenship of the country. This group will in large part be formed by descendants of the foreign born who did not receive citizenship of the host country at birth.
- Foreign-born citizens: persons born abroad and having the citizenship of the
 country of residence. This group will in large part be formed of foreign-born
 immigrants who have received citizenship of the host country, as well as persons
 with the citizenship of the host country who were born abroad.
- Native-born citizens: persons born in the country of residence, with the citizenship
 of the country of residence. This group will be in large part formed of the
 native born who are citizens of the country. It will also include descendants of
 the foreign born who were born in the country and received citizenship of the
 country of birth at the time of birth or later.

The advantage of using this typology is that it combines the advantages of both methods, while avoiding the disadvantages associated with one single method. However, it makes tabulation of migration data more complicated than simply using the native/foreign born or citizen/foreigner dichotomy. In short, although collecting information on both country of birth and citizenship may be costly and complex, doing so can result in a more comprehensive evidence base for understanding international migration, comparing migration statistics between countries, and shedding light on potential inequalities experienced by migrants.

Duration of Stay and Measurement of Migration Flows

Duration of stay, whether actual or intended, is a critical criterion for the measurement of international migration flows. According to the Recommendations, for the purposes of measuring migration flows, an international migrant is defined as "any person who changes his or her country of usual residence." A person's country of usual residence is that in which the person lives, that is, the country in which the person has a place to live where he or she normally spends the daily period of rest. Temporary travel abroad for purposes of recreation, holiday, business, medical treatment, or religious pilgrimage does not entail a change in country of usual residence (UN 1998).

The Recommendations further define two types of international migrants by the criterion of duration of stay. Long-term international migrants are defined as those who move to a country other than their country of usual residence for a period of at least one year, while short-term international migrants are people who move to a country for a period of at least three months but less than one year. (See box 1.1 for the definition of usual residence.)

In practice, most countries that compile migration flow data collect data on a yearly (12-month) basis, although some surveys and censuses use a five-year period. However, most countries in the world do not collect data on migration flows. International migration flow data are more often collected and available for foreigners than for citizens or the foreign born. Likewise, data on the inflow of international migrants are much more common than information on the outflow of international migrants. In reporting international migration flow data, many of the countries that collect such data comply with the Recommendations by collecting information on the country of previous residence for arriving migrants and next residence for departing migrants.

Long-Term and Short-Term Migrants and Data Considerations

In practice, the distinction between short—and long-term migrants is often difficult to make, especially given the different data collection systems used by different countries. It can be difficult to collect accurate information to meet the Recommendations using existing data collection systems, whether they are administrative or survey based. Not only does the country of usual residence need to be determined, but so does the migrant's duration of stay. However, the difficulties can often be overcome. According to the Recommendations, "the act of being inscribed in a population register or country other than their own, being granted a permit to reside in country, or declaring intention of staying for at least one year, are all ways of making the concept of change of usual residence measurable." This means countries can use different methods to determine duration of stay, which further complicates data comparability at the international level.

The duration of stay criterion for a long-term migrant is determined by an actual or intended duration of stay of at least 12 months, subject to the practices used by different national data collection systems. For example, different countries have different time criteria and practices for entering migrants into their population registers (for example, 3, 6, or 12 months), which complicates the international comparison of migration data. Further, self-declaration by the migrant of her intended length of stay upon entry may not necessarily correspond to her actual time spent in the country.

Duration of stay is often inferred from visa types or permit lengths, with various work and residence permits having varying lengths of duration. Data derived from such administrative sources, while essential in understanding the main purpose of stay, often include inaccuracies, as some foreigners may not be subject to these regimes because of freedom of movement agreements. By definition, undocumented migration is not included. Moreover, undercounts and overcounts occur because the number of permits issued does not equal the number of persons who have migrated, while persons may be counted more than once in case they change their visa status. Lastly, the intended duration of stay of the person to whom the document has been issued may not coincide with the length of the permit.

The United Nations recommends using both actual and intended duration of stay. Intended duration of stay was used by the United Nations Principles and Recommendations for Population and Housing Censuses (2015). Often, intended duration of stay will not match reality (either determined at 12 months and leaving earlier, or determined at less than 12 months and staying longer). Thus, it is recommended that migration figures be retroactively adjusted (using a lag of one and a half years to produce migration flow statistics). However, such adjustments are not only complex to compute, but also difficult to explain to policy makers and the public at large. Such retroactive changes would adjust for short-term migrants who stay longer than one year, and vice versa, for foreigners who were originally admitted as non-migrants but who changed their country of residence, and for asylum-seekers who became residents following the approval of their refugee claim.

The difficulty in determining change of usual residence and duration of stay is even greater when measuring the flow of short-term migrants. Short-term migrants are presumed to be a rapidly growing and increasingly important group of migrants, particularly for labor migration, coinciding with increased globalization and frequent repeated moves back and forth across international borders (for example, circular migration). Technically, short-term migrants do not normally change their country of usual residence (which remains their country of origin), but for the purposes of international migration statistics, the country of usual residence of short-term migrants is considered to be the country of destination during the period they spend in it.

In addition, the Recommendations make an effort to distinguish short-term migrants from tourists, which may sometimes be misinterpreted to mean that short-term migrants only include those who move for work or study-related reasons. In fact, asylum-seekers or other humanitarian migrants, those moving for family reunification or formation, or even climate-related migrants would be counted as short-term migrants if the duration of their moves were greater than three and less than 12 months. It should be noted that these definitions exclude temporary migrant workers, including seasonal migrants, who move to a country for a period of less than three months. The above considerations not only apply to the entry, but also the departure of international migrants, in particular citizens moving abroad with the purpose of working or establishment in another country.

Another related group of interest, but who are generally not considered migrants, are cross-border, or frontier, workers. These are foreigners who have been granted permission to be employed on a continuous basis in a receiving country provided they depart at regular or short intervals, daily or weekly, from that country. This group could also include those without formal permission (informal) to work in another country, but nonetheless commute across borders to work on a regular basis. Information on citizens and foreigners working under these arrangements is of interest to many countries.

Purpose of Stay

There is general agreement that the reasons for people migrating are complex and multifaceted. An individual's reasons to leave a country of origin could differ from their reasons to come to a country of destination. Although the reasons people move are discussed in more detail in the next chapter, it is important to consider them here, given the importance of reasons for migration for defining international migration and the relationship of purpose of stay and the sources of migration data. Some basic groups defined by purpose of stay are those moving for work-related, family-related, education-related, or humanitarian reasons. As such, in addition to distinguishing between short—and long-term migration, flow statistics are also often disaggregated by purpose of stay.

First, employment-related migration is an important and diverse category for defining migrants, and includes foreigners admitted or allowed to remain in the country for employment reasons. This group includes migrant workers (seasonal, contract, project tied, or temporary workers), as well as those with the right to free establishment (for example, citizens of the European Union), long-term settlement based on high-skilled qualifications, or intra-company transferees. People may move for temporary work for a period of less than three months, and thus are not counted as migrants.

Second, another category of migrants is those admitted for education or training, including students, trainees, and interns.

A third major group of migrants are those who move for the purposes of family reunification or formation. This group includes foreigners admitted because they are relatives of citizens or other foreigners already residing in the receiving country.

The fourth major group of migrants are those admitted for humanitarian reasons, which include refugees, asylum-seekers, foreigners granted temporary protected status, and persons admitted for humanitarian reasons.

Fifth, migrants may be granted legal permission to stay in a country on the basis of criteria such as ancestral ties, retirement, entrepreneurship, or by having their irregular migration status regularized.

The categories classifying migrants by purpose of stay are not mutually exclusive, which can create challenges when determining these groups. As people often move for many reasons, determining a single reason for moving can be difficult. In addition, attributing migration to a single reason can lead to misunderstanding of appropriate policy needs. However, purpose of move can be gleamed from several data sources, including administrative and self-reported sources. One of the most common methods to determine a migrant's purpose of stay is to use visa or resident permit information, which includes the legal reason for a migrant's stay in the country. Another method is to ask migrants themselves as to their reason for moving, through a household survey or population census. Although the results of these two different methods can vary greatly, under a rights-based approach to data, self-identification is the preferred method to collect and disaggregate data, as it should not create or reinforce existing discrimination, bias, or stereotypes exercised against population groups, including by denying their identity(ies) (OHCHR 2016).

Key Messages and Recommendations

Measurement of the size of the migrant population is dependent on several concepts, definitions, and criteria, which are often difficult for countries to measure. However, adherence to internationally recognized definitions will improve the comparability of international data. Change of usual residence and duration of stay are critical components for defining migrants, particularly for the measurement of migration flows. Lastly, purpose of stay is an essential variable for understanding international migration, as will be discussed in Part 2 on reasons for migration.

Chapter 2

Sources of Migration Statistics United Nations Population Division and United Nations Statistics Division³

Introduction

Sources for international migration statistics can be broadly grouped into three categories, namely, (a) population censuses; (b) administrative records, including border collection; and (c) sample surveys.

Population Census

The population census is a major source of data on the international migrant stock, which can be enumerated as the foreign-born population or the foreign population, that is, the number of foreign citizens in a country. It is also possible for the population census to capture information on place of residence of people at a specific date, typically one or five years before enumeration, thus allowing the possibility of obtaining the number of international migrants who arrived during the period considered and remained in the country until the time of enumeration.

Three core topics that are recommended by the United Nations to be included in population censuses to identify international migrants are:⁴

- 1. Country of birth
- 2. Country of citizenship
- 3. Year or period of arrival in the country for foreign-born persons.

Much work needs to be done, in particular with regard to the inclusion of year of arrival in the census.

³ This chapter was prepared by Bela Hovy and Nina Haelg, United Nations Population Division and Keiko Osaki Tomita and Haoyi Chen, United Nations Statistics Division.

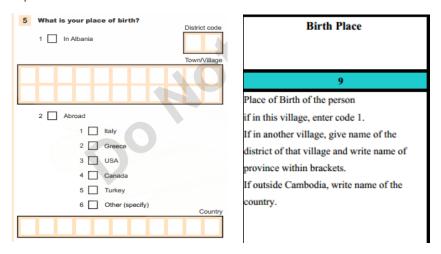
⁴ United Nations (2016), *Principles and Recommendations for Population and Housing Censuses*, Revision 3, forthcoming.

Information on "country of birth" is usually collected by questions on place of birth. These questions capture the district or province (or other geographic division detail) if the person was born in the country, or the country of birth if the person was born abroad. Figure 2.1 gives two examples of how country/place of birth is asked in censuses.

Information on "citizenship" has been gathered by asking the questions in various ways. Some censuses only ask whether a person is a citizen of the country or not (a foreigner). Many ask what country of citizenship a person has, and sometimes also how the citizenship was acquired, such as whether by birth or naturalization, and/or whether a person has multiple citizenships (figure 2.2).

Another topic that is recommended is "the year or period of arrival in the country" for foreign-born persons (figure 2.3) .Information derived from this topic can be used to distinguish between migrants who recently arrived and those who arrived a long time ago, which is important for analyzing the integration of migrants. In national censuses, the question may be asked to foreign-born persons only or to persons who have lived abroad regardless of their country of birth, if returned migrants are also of policy interest. Whether the year or period refers to the most recent or first arrival is left for countries to choose.

FIGURE 2.1 Examples of Questions on Country/Place of Birth in National Population Censuses



Source: National population censuses, United Nations Statistics Division, national census questionnaires (http://unstats.un.org/unsd/demographic/sources/census/censusquest.htm).

FIGURE 2.2 Examples of Questions on Citizenship in National Population Censuses

3 Quelle est votre nationalité ? • Française	P03 NATIONALITY What is [NAME]'s Nationality?
- Vous êtes né(e) français(e).	01 Ghanaian by birth 02 Dual Nationality 03 Ghanaian by naturalisation 04 Nigerian 05 Liberian 05 Sierra Leonean 06 Sierra Leonean 07 Gambian 08 Togolese 09 Burkinabe 10 Ivorian
11 Is the person an Australian citizen? Remember to mark box like this:	es, Australian citizen Ves, Australian citizen No

Source: National population censuses, United Nations Statistics Division, national census questionnaires (http://unstats.un.org/unsd/demographic/sources/census/censusquest.htm).

FIGURE 2.3 Example of Questions on Year of Arrival in National Population Censuses

months?	ther country for at least six
O 1 Yes O 2 No (Skip to P1	16)
P14. In which country did you l	ast reside?
Name of country	
P15. In what year did you last c	ome to
The Bahamas to live?	
Year	0000000000 0000000000 0123456789

Source: National population censuses, United Nations Statistics Division, national census questionnaires (http://unstats.un.org/unsd/demographic/sources/census/censusquest.htm).

There are other questions that are relevant to international migration, which are not considered core topics by the United Nations, but have been included in some national population censuses. The questions include emigration of former household members, returned migrants, country(s) of birth of parents, and previous residence abroad.⁵

⁵ More information on how questions are formulated in national censuses is available in the United Nations *Handbook on the Use of Censuses and Surveys to Measure International Migration* (2017).

Population censuses are widely recognized as the major source of statistics for international migrant stock (stock of foreign-born and stock of foreigners, for example). However, certain data collected in population censuses can also be exploited to produce rough estimates of international migration flow for specific periods, ending with the time of the census. Together with population data from a previous census, net migration flow for the period between the two censuses can be estimated. Net migration may be estimated for a series of successive census pairs to examine trends in net migration over the decades.

For more recent indicators of immigration flow, the census uses a question on place of residence at a specified time in the past. This allows the possibility of obtaining the number of international migrants who arrived during the period considered and remained in the country until the time of enumeration. The most common time frames used in recent censuses are five years and one year prior to the census.

The advantages of using censuses to measure international migration are associated with the nature of population censuses. The principle of universal coverage by censuses ensures better coverage of the migrant population. Relative uniformity in question formulations ensures better data comparability across countries. Censuses collecting a variety of socio-demographic information offer potential for characterizing international migrants in terms of certain basic demographic and socioeconomic characteristics included in the census questionnaire. For instance, censuses allow for a comparison of access to housing, employment, and social services between migrants and non-migrants.

At the same time, censuses have several limitations in measuring international migration. First, data are not frequently available, usually only once in 10 years. Second, because censuses can accommodate only a limited number of questions related to migration, they cannot provide the detailed information needed for a meaningful analysis of the causes or consequences of international migration. Third, because censuses capture only people in the country at the time of the census, they cannot provide a complete or detailed characterization of international flows of people.

Last, the population census, by its very nature, cannot provide reliable information on emigration from a country. Estimates of net immigration can be derived for the intercensal period by using census data on the total population, taking into account births and deaths that occurred during the same period.

Administrative Records

Administrative records that can be used for the study of international migration can be grouped into three major categories: (a) administrative registers, (b) collection of information at the border, and (c) other administrative sources.

- a. Administrative registers include population registers; registers of foreigners; and other special types of registers covering groups of persons, such as asylum-seekers. Administrative registers have the potential to produce information on certain groups of persons who change their country of usual residence and thus qualify as international migrants.
- b. Collection of information at the border, or "border collection," gathers information at ports of entry into and departure from a country, regardless of whether they are actually located at the border. Ports of entry and departure usually include airports and other sites at which persons formally enter or leave a national territory. Statistics derived from border collection have the advantage of reflecting actual moves with a high degree of accuracy in terms of timing, mode of transport, and port of entry or departure. However, the task of gathering information from all persons arriving in and departing from a national territory is beyond the means at the disposal of many countries. In practice, statistics derived from border collection rarely provide the best measures of international migration flows, because of the difficulties involved in gathering reliable information from a large volume of people subject to different degrees of control depending on their citizenship, mode of transport, and port of entry. Passenger surveys of international migrants cover a very small percentage of arrivals and many may enter for other purposes without declaring migration intention
- c. In addition to registers, there are other administrative sources producing data that are indicative of inflows or outflows of particular groups of international migrants. For example, statistics derived from the issuance of residence permits may refer to inflows of foreigners to a country; those derived from the issuance of work permits can refer to inflows of foreign migrant workers; and those derived from the official clearance of departing citizens to work abroad can be a proxy for labor out-migration.

All these administrative sources share a common trait: statistics derived from them usually refer to administrative records rather than people. Thus, the number of residence permits issued over a year may not be equivalent to the number of persons admitted over that year, if a person receives more than one residence permit in a year or if the permit granted to the head of a family covers his or her dependents. Similarly, the number of deportations carried out over a period may be higher than the number of persons involved, if those deported return and are sent back several times during the period; or the number of asylum applications filed can understate the number of asylum-seekers involved when a single application can be filed on behalf of a family.

Another drawback of using administrative sources is that sometimes permits are issued not only to new arriving foreigners in a country, but also to those who have resided in the country for a period of time for renewal or change of visa types. Therefore, the statistics generated from administrative records may not reflect the actual influx of migrants.

Sample Surveys

Two types of sample surveys are currently being used to measure or study international migration: (a) household sample surveys, and (b) passenger surveys administered at the border. The two surveys serve very different purposes.

Household sample surveys include specialized international migration surveys and household surveys, which may not necessarily focus on, but may include questions on, international migration, such as the Labor Force Survey, Demographic and Health Survey, and Living Standards Measurement Study. The strength of household sample surveys in studying international migration is the wealth of information they collect compared with other data sources, which allows for in-depth analysis of the likely causes of international migration or its consequences for the persons involved. Another advantage of household surveys in comparison with other sources is their flexibility to capture the group of migrants of most interest to the study. However, because of the low percentage of international migrants present in most countries, the sample size of the survey needs to be reasonably large to identify enough migrants for meaningful analysis.

Passenger surveys directly target persons who cross or are about to cross national borders. The surveys are carried out by face-to-face interviews with a sample of passengers as they enter or leave the country. The survey design involves sampling a route or port on a given day and within a given period. And within each period, certain passengers passing an interview line are systematically chosen to be interviewed. A few countries, such as the United Kingdom, Sri Lanka, and the Republic of Korea, have been successful in using passenger surveys to identify international migrants. Such data collection mechanism seems to be most successful for island countries that do not have land borders with other countries. A major challenge in obtaining data at border crossing points is the sheer volume of movements that take place, the vast majority for purposes other than to change residence. Hence, it is difficult to distinguish migrants from travelers. Passenger surveys also confront the problem of the lack of an appropriate sampling frame.

Data Gaps and Challenges: Undocumented Migrants

With statistical and administrative sources, undocumented migrants may be partly or totally excluded from data collection. Administrative registrations, such as those conducted as part of regularization programs or the registration of irregular migrant worker apprehensions by police or administrative records with the ministries of labor or ministry of employment, have been used to estimate the total number of "irregular" migrants. However, the numbers based on such registrations may be

more indicative of overall positive or negative trends or the authorities' efforts and priorities than (variations in) their actual numbers.⁶

Unlike statistical sources, administrative sources are designed to collect information and generate data for administrative functions, and often are not designed to support research or statistical analysis explaining the reasons for migration. As with statistical sources, users of administrative data sources should take into consideration the purpose and quality of the data collection before making use of the data.

The responsible government body and the types, quality, and regularity of the administrative information collected vary widely. One advantage of administrative sources is their ongoing coverage; they are often updated on a continuous basis. However, in developing countries, the advantages of administrative sources can be diminished due to limited official collection and reporting, owing to a lack of funding and insufficient human resources.

Good Practice

For data on "irregular migrant workers," surveys and qualitative (ethnographic) fieldwork focused on this hard-to-reach population can elicit information about how irregular migrant workers enter and participate in the labor markets in destination countries. These methods could also be used to study return migrants and how they reintegrate into their domestic labor markets. Additional examples of good practice are included in chapter 14.

⁶ The reports from the Clandestino project provide a comprehensive overview and evaluation of the different methods for estimating the number of undocumented migrants present in several European countries. The reports are available from http://irregular-migration.net//Working_papers.6113.0.html.

Chapter 3

Innovative Data Sources

The International Organization for Migration's Global Migration Data Analysis Centre (IOM's GMDAC)⁷

Introduction

This chapter focuses on the potential of innovative migration data sources, such as mobile phones or social media, for measuring migration and its impact on development. Although the availability of migration statistics from traditional data sources (described in chapter 2) is not as poor as is often claimed, and countries' ability to collect migration figures regularly has improved, significant gaps remain in the quantity, accuracy, timeliness, disaggregation, comparability (over time and across countries), and accessibility of migration-related data. For instance, a third of African countries have not conducted a national census in the past 10 years, five of them in 20 years.8 Where national censuses are regularly carried out, the time lag between data collection and actual availability for analysis is such that data cannot inform policies in a timely manner. The same is true for household surveys (which are also very costly) and administrative sources of data. This implies that, on the one hand, there is a need to build countries' capacity in collecting, processing, analyzing, and disseminating migration data from traditional sources; on the other hand, countries should look into the vast and underexplored potential of innovative sources of data. Both aspects will be relevant in strengthening the migration evidence base, as called for at the 2013 United Nations High-Level Dialogue on Migration and Development. And both aspects would contribute to a better understanding of the impact of mobility on development, which is all the more relevant given the likely inclusion of migration in the United Nations' post-2015 Sustainable Development Goals (SDGs).

⁷ This chapter was prepared by Marzia Rango, Research Officer, IOM's GMDAC.

⁸ Source: Africa Survey 2014, available at http://gga.org/africa-survey.

Innovative Data Sources: What They Are and Why They Are Relevant

Mobile phones, online tools and platforms such as social media or online payment services, and digital sensors and meters such as satellite imagery represent potential innovative, "big data" sources of migration data. Rapid technological advancement coupled with emerging socioeconomic trends has contributed to generating an unprecedentedly large, detailed, and complex data flow from these sources, which keeps being fed at a rapid pace (Reimsbach-Kounatze 2015).

There are now seven billion mobile phone subscriptions globally, at least five billion of which are in developing countries. Mobile phone penetration reached 69 percent in Africa and 89 percent in Asia and the Pacific by the end of 2014, and the growth in mobile phones in these regions is the highest globally (ITU 2014).9 The number of Internet users worldwide approached three billion by the end of 2014, two-thirds of which were in developing countries (ITU 2014). The number of Internet users through mobile phones in Africa is predicted to increase 20-fold by 2020, and voice-call traffic is expected to double by then (Ericsson 2014). Use of social media is also growing rapidly in the developing world. Mobile money transfer systems for domestic remittances have risen exponentially, especially in some African countries (notably the M-Pesa mobile money service in Kenya), thanks to mobile technology diffusion and the low costs associated with such transfers (relative to alternative money transfer services). The use of mobile technology for international remittance transfers accounted for less than 2 percent of global remittance flows in 2013 (\$10 billion of \$542 billion), and there are still significant challenges related to the wider diffusion of digital remittance payments (World Bank 2014). However, this use of mobile technology is also likely to increase in the coming years. More than 30 million physical sensors and meters, such as satellite and infrared imagery, or devices to record electricity consumption and carbon dioxide emissions, are used today in a variety of areas, including transport systems, security, and the environment. All these patterns point to the relevance of innovative sources of data for improving migration statistics.

Although there is no commonly accepted definition of "big data," it can be broadly described as anonymized data inadvertently created and stored—usually in private companies' databases—every time a mobile phone call is made, a text message sent, an Internet search run, or a social media update posted (a phenomenon commonly referred to as "data exhaust") (Latouzé 2012). The main characteristics of big data are usually referred to as the three "Vs." The first is the "volume" of data available, which is of unprecedented size due to the diffusion of mobile devices, web-based tools, and social media worldwide. The second characteristic is the "velocity" at which such data are generated, basically in real time. "Variety" or

⁹ Mobile phone penetration in Organisation for Economic Co-operation and Development countries is above 100 percent (ITU 2014).

complexity is its third characteristic, since big data is made up of structured data (for example, online payment records), and unstructured data (for example, social media content). The analytical capacity required to process the large amount of data coming from these sources is also unprecedented; advanced computational methods are needed to extract meaning from such data, and capacity is unequally distributed across countries—the so-called "digital divide."

The types of big data sources that can be most relevant for the analysis of migration-related phenomena can be classified under two broad categories:

- 1. Cellular calls, texts and transfers activity: namely, communication services (calls and text messages) and financial services (mobile money transfers).
- 2. Internet-based activity (including from cell phones): information services (use of search engines, repeated logins to a website), communication services (use of e-mails and social media), and financial services (online money transfers).

Judging from existing migration studies based on big data, these sources can potentially inform migration statistics in the various areas included in this handbook, such as:

- Forced displacement due to environmental disasters, conflict, and post-conflict situations
- Remittances or patterns of mobile money transfers
- More generally, the estimation and prediction of *migration trends* (flows and rates), notably patterns of internal migration, which are usually more difficult to track through traditional data sources
- Human trafficking, as the information collected from phone calls or text and e-mail messages exchanged with victims can be used to understand trafficking trends as well as to provide targeted and timely assistance to victims.

Big data sources such as social media content can contribute to the analysis of transnational networks as well as public discourse on migration in destination countries. Such analyses are useful for understanding the social determinants and social impact of migration in recipient communities. The following section describes existing studies in these areas to learn from, expand, and build on, for migration data collection in the future.

Existing Sources and Standards for Data Collection

Mobile Phone-Based Sources

The most advanced existing studies using big data in the field of migration are based on call detail records (CDRs). CDRs are anonymized digital records that are passively collected by mobile network operators every time a network subscriber

makes a call. Importantly, such records include information about the location of the calling and receiving ends, approximated by the location of the cell tower to which the subscriber identity module (SIM) card connects during a mobile phone call (the tower in closest proximity). Location information is more precise in urban areas, where the distance between cell towers is shorter; the information is relatively less accurate in rural areas where cell tower concentration is lower. Apart from location, CDRs contain information on the time and duration of the call, as well as the calling and receiving numbers, allowing for anonymous identification of the caller and receiver.

CDRs could help to fill knowledge gaps in areas where data collected through traditional sources is porous, namely, internal and temporary or circular migration. In a study by Blumenstock (2012), CDRs are used to estimate internal migration patterns in Rwanda. Eagle et al. (2009) use call records to inform an analysis of the differences in mobility patterns between rural and urban residents.

CDRs can potentially allow for tracking post-disaster displacement in a timely fashion, and therefore inform prompt and specifically targeted assistance operations, given that people move rapidly and in an uncontrolled way in the aftermath of natural disasters. This situation is demonstrated in a pioneering study by Bengtsson et al. (2011), where population outflows from Port-au-Prince following the 2010 earth-quake are estimated using the anonymized records of 2.8 million cell phone owners who made at least one call before or after the earthquake struck. The location information contained in the call records make it possible to track the magnitude of people's movements accurately, as the estimates provided by the study come close to data collected retrospectively.

Given the potential of innovative data in these contexts, institutions such as Georgetown University and the United Nations University are looking into ways to use big data sources to create early-warning systems for conflict—or disaster-induced population displacement.¹⁰

Other types of cell phone usage records have been used, for instance, to track the modalities and determinants of mobile money transfers in post-disaster situations (Blumenstock et al. 2013). Beyond call logs, anonymized records of text messages and money transfers between 1.5 million subscribers to a Rwandan network operator in the four-year period following the 2008 earthquake allowed recognizing risk-sharing patterns for a significant section of the population. Finally, Polaris Project, 11 an antihuman trafficking organization based in the United States operating a hotline for trafficking victims uses information obtained from phone calls and texts or e-mails with victims to identify trafficking trends and provide an immediate and targeted

 $^{^{10}}$ See http://www.georgetown.edu/research/news/isim-forced-migration-warning-system.html and http://www.ehs.unu.edu/mdeep.

¹¹ http://www.polarisproject.org/.

response. The organization's database contains information on age, immigration status, language needs, and shelter requirements.

Internet-Based Sources

Studies based on big data from Internet-based sources, although still less advanced, are growing rapidly. Anonymized search query records of certain terms can be used for various purposes, such as estimating the number of foreign nationals in a country. For example, by looking at the Google "search volume index" (the volume of searches for the term of interest relative to all searches run within a specific region in a time period) of the term "Polski" in England over 2004–10, Williams and Ralphs (2013) obtained a trend of the number of Polish nationals in the United Kingdom that was similar to that from official statistics. The results for Lithuanian and Romanian nationals were also quite close to the official figures. Despite the current methodological limitations and concerns over data quality, this approach has the potential to predict sudden changes in migratory patterns to a specific area.

Records of repeated logins to the same website over a period can help infer migration flows in the short to medium term, and identify circular or temporary migration patterns in certain settings. For instance, in Zagheni and Weber (2014), Internet Protocol (IP) addresses from repeated user access to the Yahoo! Services website of more than 100 million users over one year allowed the authors to infer global mobility patterns and estimate the likelihood of a user moving to another country. By looking at the mobility patterns of Yahoo! users, the authors formulated a statistical model to infer migration rates at the population level, adjusting the estimates to correct for different Internet penetration rates in different countries, and choosing parameters that maximize the likelihood of observing official data on emigration rates for a certain number of countries. This type of analysis is technically made possible by the fact that IP-addresses mostly correspond to a physical location, and data-cleaning protocols can be used to reduce the inaccuracy of IP-based location information

The same could be done by mapping the IP addresses from which e-mails are sent. Moreover, users' self-reported information allows the disaggregation of anonymized records by age and gender, and therefore the estimation of age—and gender-specific migration rates (Zagheni and Weber 2014). However, one needs to assume that a user's country of ordinary residence is the one from which she or he sends the highest number of e-mails. The analysis needs to correct for other methodological issues, such as self-selection due to the sample being only composed of Internet users; however, the speed of data generation and the short time lag between the collection and availability of data for analysis provide a potential for migration studies that is worth exploring further.

Social media is a potentially rich source of migration data too, given its widespread usage and some specific features, such as the geo-location of users' activity. The number of monthly active users of Facebook is now about 1.4 billion; that

of Twitter is approximately 284 million.¹² In Africa, where Internet penetration is lowest, Facebook users reached 100 million in 2014, and 11.5 million geo-located Tweets originated across the continent in the last three months of 2013.¹³ The fact that users' activity on social media is geo-located, and that users often voluntarily provide geographical information, means it is possible to use the information to infer migration trends, as well as to compare patterns of internal and international migration (Zagheni et al. 2014; Facebook 2013¹⁴). The self-selection bias inherent in the use of such sources of data that refer solely to the part of the population regularly using social media needs to be addressed to extrapolate meaningful results from these studies.

Some innovative analyses of migration-related phenomena have also been carried out based on unstructured and publicly available social media content. Interactions on social media contribute to the formation of virtual transnational networks of migrants, and can help in understanding how such networks are formed and their role in incentivizing further migration (Nedelcu 2012).

Finally, social media content may be a source of information on public attitudes toward immigrants and immigration,¹⁵ although there are issues with the quality of self-provided data and difficulties in the processing of vast quantities of unstructured information.

Data Gaps and Challenges

This chapter has shown how innovative data sources can become important, comprehensive, relatively cheap, and timely complementary sources of data for the analysis of migration-related phenomena. However, big data do not come without limitations. First, serious privacy and ethical issues derive from the fact that the types of big data described in the chapter are mostly generated inadvertently by users. There are also civil liberty concerns related to the potential use of big data for surveillance of people, for instance, by government agencies, which could seriously affect people's freedoms. With specific regard to the field of migration, big data offer unprecedented possibilities to observe and surveil population movement, posing significant risks of violation of people's fundamental human rights, as well as personal safety concerns. Use of such information for the purposes of research and policy therefore needs to be matched by guarantees of confidentiality and respect for individual privacy. Policy makers, researchers, and practitioners urgently need to come together to establish the appropriate methods to meet international

¹² Figures available on the Facebook Inc. and Twitter websites.

¹³ See http://www.portland-communications.com/publications/how-africa-tweets-2014/.

¹⁴ See http://www.unglobalpulse.org/big-data-migration.

¹⁵ See www.uniteeurope.org.

standards within an adequate regulatory and legislative framework for the collection, analysis, and sharing of data from innovative sources.¹⁶

More generally, the use of innovative sources of data raises concerns over the potential widening of the gap between information-rich and information-poor countries. There is a risk that the use of big data could exacerbate global inequalities instead of enhancing evidence-based policy making for development. Despite the exponential growth of new technologies in all regions of the world, some areas are still lagging. African countries' investments in Internet services are less than one-third of those in advanced economies, equaling 1 percent of gross domestic product (GDP). ¹⁷ Yet,, although only 7 percent of local households in Africa, mostly in South Africa, have access to the Internet in the home, it has been estimated that 48.9 percent of South Africans and 38 percent of Nigerians have access to the Internet, mostly via cell phones (Internet Society, http://www.internetsociety.org/map/global-internet-report/#global-internet-penetration).

There are technical and analytical challenges in the effective use of data from innovative sources. Big data are sometimes not easily accessible or shared between the repositories of data (mostly private companies) and those with the technical capabilities and willingness to process and analyze the data, not least because of inappropriate infrastructure, data management, and security systems. On an analytical level, big data can be of poor quality or not easy to "clean," and therefore extracting meaningful insights (due also to their enormous volume and complex nature) can be difficult. In addition, good quality big data are not automatically meaningful. A large sample is not necessarily representative of the entire population, due to the inherent self-selection bias of the data source. Biased data can generate biased analyses, and may lead to the formulation of inappropriate or potentially harmful policies. Careful processing and analysis of big data require specific skills and technical capabilities, which need to be developed.

Key Messages and Recommendations to Address Gaps

To make systematic and effective use of innovative data sources possible in the field of migration and development, more work at the technical, analytical, ethical, and institutional levels is required. However, this does not diminish the value added of big data to complement existing data sources and fill current gaps in the migration knowledge base, tapping into the opportunities offered by technological progress. Acknowledging the potential of big data (particularly for better matching between

¹⁶ See "A World That Counts: Mobilizing the Data Revolution for Sustainable Development" by the UNSG Independent Expert Advisory Group on a Data Revolution for Sustainable Development (2014), available at http://www.undatarevolution.org/report/.

the "data production cycle" and "policy decision cycle" ¹⁸ due to its timeliness, level of detail, and frequency) as well as its shortcomings (including confidentiality, quality, and partiality) is the first step toward finding ways to make better use of big data sources in the field of migration. Interest is growing among businesses, governments, international organizations, and academics, as demonstrated by increased investments and initiatives in this area. Further international dialogue and knowledge exchange between all these actors is needed to establish frameworks and practices to systematize the use of innovative sources for migration statistics. This is particularly crucial in the light of the likely inclusion of migration-related targets and indicators in the 2030 Agenda for Sustainable Development, and the need to monitor progress toward the achievement of migration-related targets.

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¹⁸ See note 8.

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Part 2 Reasons for Migration

Chapter 4

Work

International Labour Organization¹⁹

Key Policy Issues

One of the key motivations behind international migration is moving for jobs, with people migrating internationally due to economic inequality and/or in search of work. Combined with vulnerability to economic, political, and environmental crises and shifting demographics, these push and pull factors will continue to drive labor migration for decades to come. These contemporary realities have led to the following outcomes:

- Increased numbers of women migrating, where women currently represent almost half of all migrants, an increasing number of whom are migrating on their own account (or independently) for the purpose of employment
- A significant young labor migrant population (between ages 15 and 24 years), representing one in eight migrant workers
- Greater intraregional movement, where more migrants seek work within their own developing region (South-South labor migration)
- A shift from simple origin-destination dichotomies to a situation where a country may be a simultaneous destination, transit, and origin country (International Labour Organization, Labour Migration and Development: Setting a Course for the Future, United Nations, 2013).

The key policy issues resulting from people migrating for work go beyond labor migration policies and relate to demographic, social, economic, labor market, and education/training policies. Two noteworthy policy issues for labor migration are (a) what and how does the structure of national, regional, and local economies drive migration for employment; and (b) how does labor migration fit within current economic and development policy decision making?

¹⁹ This chapter was prepared by Mustafa Hakki Ozel, Natalia Popova, Jaewon Lee, and Ryszard Cholewinski, International Labour Organization.

The ability to answer these policy questions adequately depends on the availability and quality of key statistics on migrant workers and labor migration.

Data Needed to Analyze the Topic

Although data collection capabilities vary, at times significantly, across different institutions and countries, several key statistics should be considered at the national level as "priority data" to improve the understanding of labor migration, as well as to promote comparability of results and their analysis across origin and destination countries

Data collection and analysis prioritization should answer two basic questions:

- 1. What type of information (such as data variables) is needed to understand the levels of and reasons behind labor migration?
- 2. Which data collection methods (such as cross-sectional or longitudinal) and methodologies (including concepts and definitions) are needed to meet common national, regional, and international standards and definitions?

The key statistics for understanding the socioeconomic profile of migrant workers include the following:

- Age
- Sex
- Occupation
- Educational attainment
- Economic activity²⁰
- Labor force status (as per the 19th International Conference of Labour Statisticians (ICLS) Resolution on statistics on work, employment, and labor underutilization)
- Working conditions (such as formal or informal, working hours, and wages)
- Reason(s) for migration.

Additional information can further facilitate comparative data analyses across migrant worker groups, and the assessment of differences in labor market profiles and geographic differences (urban/rural areas, countries, and regions). Such additional information includes the following:

- Geographic location (such as region) of current employment
- Time of (most recent) migration for employment

²⁰ The United Nations (2008) provides the international reference classification of all productive activities through its report, International Standard Industrial Classification of All Economic Activities (ISIC), Rev. 4 (ST/ESA/STAT/SER.M/4/Rev.4) (p. 307), New York.

- Recruitment mechanisms (for example, private recruitment agency, public employment service, and personal networks)
- Work status (including migrant workers in irregular situations²¹)
- Citizenship/nationality · Residence status (such as possession of a valid residence permit)
- Country of birth, origin, or most recent residence before migrating for work
- Ethnicity, religion, language, or other relevant terms of identity, where available
- Family/household situation (for example, civil status and household composition).

Occasionally, data collection and statistical reporting require sensitivity in how questions are asked and how data are released. For guidance on handling sensitive topics and vulnerable populations, data collection offices are encouraged to consult the available academic and government research reporting on these issues in general (Fowler 1995) and in the field of migration (Düvell et al. 2010; McAuliffe 2013, 23). Unless restricted by law, omitting questions deemed "sensitive" from data collection is one possible, but limited, solution. As an example, "resident status" may be a sensitive topic for persons in an irregular situation in a country. However, formulating policy responses to adequately address the needs of this population is more likely to be effective if based on quality data that include the size of the targeted population (and, if possible, its characteristics).

Existing Sources and Standards for Data Collection

The International Labour Organization (ILO) supports the development and improvement of data collection instruments, such as household-based labor force surveys, according to international standards and common methodologies. The ILO encourages the adoption of such standards on labor migration as put forward in Resolution I: Resolution concerning statistics of work, employment and labor underutilization to the 19th International Conference of Labour Statisticians (ICLS 2013).

Moreover, policy makers and practitioners seeking the adoption of or further adherence to common standards in the measurement of labor migration can find additional guidance from international sources, including:

 International Migration Statistics: Guidelines for Improving Data collection Systems (p. 453). International Labour Office, 1997.

²¹ A migrant worker in an irregular situation refers to any person not "authorised to enter, to stay and to engage in a remunerated activity in the State of employment pursuant to the law of that State and to international agreements to which that State is a party." (Derived from article 5 of the International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families, cf. United Nations 1990).

Recommendations on Statistics of International Migration, Revision 1 (p. 113).
 United Nations, 1998.

Further, although there are internationally recognized legal definitions of an international "migrant for employment" (C.97, Article 11) or "migrant worker" (C.143, Article 11, UN ICMW, Article 2), there is no internationally accepted statistical definition for data collection. Therefore, the ILO recommends that for the purposes of data collection, the term "migrant worker" also encompass persons who may not currently be employed or economically active at the time of their migration.

Data Gaps and Challenges

To address key policy issues on labor migration, timely and quality information must be collected, reported, and made available for analysis and debate. Generally speaking, gaps and challenges in the collection, use, and availability of official statistics result from a range of sometimes overlapping technical, political, and financial reasons, including:

- Lack of quality data relevant to the analysis of labor migration, including missing populations of interest, inconsistent periods of data collection, or key characteristics not being collected
- Limited data comparability due to the use of different concepts, definitions, and measurement methods
- Lack of infrastructure to process data in national data collection institutions or at border crossing points
- Poor data quality assurance policies or programs for data collection, security, and confidentiality
- Insufficient expertise among staff collecting or analyzing data
- Lack of infrastructure to publish key characteristics, populations, or places of interest
- Insufficient priority given to labor migration in national policy agendas and related budget allocations.

These issues need to be understood for each data source in the light of national circumstances and the overall statistical and administrative capacity of the country.

For statistics on international labor migration, countries are likely to be located at different points along a continuum between the following situations. (a) The country's government may have limited resources and statistical capacity, or there are many entry/exit ports through which many international travelers pass, which are difficult to monitor adequately. (b) The country's government may have ample resources and experience, as well as a strong statistical capacity, or the country may have a limited number of ports through which a limited number of travelers

pass. It is reasonable to expect better statistics on international migrant workers from countries close to type (b) than from countries close to type (a).²²

Good Practice

Box 4.1 describes an example of good practice.

BOX 4.1 Labor Migration Modules (Labor Force Survey): A Baseline for Measuring Ukraine's and Moldova's Migrant Workers at Home and Abroad

With the goal of improving the collection and production of internationally comparable labor migration statistics, the International Labour Organization (ILO) created the Labour Migration Module as a series of questions on labor migration that can be added to existing household surveys, including the Labor Force Survey (LFS), in countries of origin and countries of destination.

The module was piloted in 2006–07 in four countries (Armenia, Ecuador, the Arab Republic of Egypt, and Thailand), and then implemented as part of LFSs in Ukraine and Moldova in 2012. The survey covers the following:

- Scale, scope, and geographic coverage of labor migration
- Socio-demographic composition of labor migrants, including their educational attainment and areas of training before departure abroad
- Economic activities, working conditions, and frequency and duration of trips.

Conducted among all regions of Ukraine (population 45.5 million) and Moldova—except Transnistra—(population 3.5 million), more than 23,000 Ukrainian households responded and about 6,000 Moldovan households participated in the Labour Migration Modules. More than 45,000 people in Ukraine and more than 11,000 people in Moldova were interviewed about labor migration issues and how they personally affected their lives. The survey sought answers about where Ukrainian and Moldovan workers migrate for employment, their education and qualifications, their economic activities at home and abroad, the frequency and duration of their journeys, and other aspects relevant to governing labor migration flows.

The Labour Migration Module offers many benefits to the collection of data on labor migrants. The module provides a rich source of data, including social and economic characteristics of labor migrants. Assessments to date show that

²² See Hoffmann and Lawrence (1996) for more discussion on these situations.

the module promotes greater protection of and respect for migrant workers' rights by providing governments with a tool for collecting reliable data on the number of migrant workers, their working and living conditions, and remittance flows and their use. Furthermore, by using existing data collection instruments and infrastructure, the module employs a cost-effective implementation strategy and minimizes any additional burden on national statistical offices.

A better understanding of labor migration and the choices migrants make can help governments to formulate effective and coherent policies, as well as improve the global knowledge base on labor migration and the challenges and opportunities it presents. The work in Ukraine and Moldova was implemented by the ILO in cooperation with Moldovan and Ukrainian tripartite partners, the International Organization for Migration, and the World Bank, and was funded in the framework of the European Commission's thematic program of cooperation with third countries in the areas of migration and asylum. The overall objective was to strengthen Moldova's and Ukraine's capacity to regulate migrant labor and promote sustainable return, with a particular focus on enhancing human resources and preventing skills waste.

Sources: Report on the Methodology, Organization and Results of a Modular Sample Survey on Labour Migration in Ukraine. Budapest, ILO, 2013; Measuring Labour Force Migration in Moldova (report of the project "Effective Governance of Labour Migration and its Skill Dimensions"), Geneva, ILO, 2013.

Key Messages and Recommendations

Evidence-based policies on migration and development derive from the collection and reporting of accurate, up-to-date, and relevant data on international migration, and the contributions of migrants and migration to the global labor force and to origin and destination countries' sustainable, inclusive, and equitable development. Moreover, the regular collection of quality data on the magnitude of and reasons leading to labor migration are essential for developing appropriate policy responses to understand the impacts of labor migration on sending and receiving countries.

In this area, the priority actions are twofold: close the data gaps and raise the profile of (labor) migration:

• Support and build quality data collection capacities (including infrastructure, staffing, and data instruments, such as household-based surveys) that provide evidence-based responses to the key policy questions of: (a) what and how do structural realities drive labor migration, and (b) how does labor migration fit within current economic and development policy decision making?

 Identify international migration (and labor migration in particular) as a priority issue not only for immigration, but also for sustainable, inclusive, and equitable development.

The lack of sufficient financial resources and technical capacities associated with the gathering of migration data, especially in low- and middle-income countries, poses a formidable challenge. Inclusion of an additional set of questions has an impact on survey costs and, given tight public budgets, this might hamper implementation. In addition, national statistical offices have an agreed long-term data collection plan with the government, and it is difficult to include new surveys, even in cases where international funding is available. The inaccessibility of donor funding poses a challenge in ensuring sustainability for data collection in the future.

At the international level, having reliable data on labor migration could strengthen policy coordination and development efforts among origin and destination countries, leading to the design of effective and efficient migration frameworks based on strong evidence. Thus, efforts to increase the comparability of existing migration data should be enhanced, for example, through regular forums and meetings of statistical entities. International organizations, such as the United Nations family, have an important role to play in building capacity and facilitating this process. The 1998 United Nations Recommendations on Statistics of International Migration is an important, internationally agreed instrument to be promoted and complied with to the greatest extent possible.

Adopted in 1985, ILO Convention 160 sets out minimum guidelines encompassing the collection, compilation, and publication of basic labor statistics. Countries ratifying Convention 160 report annually on their application of the convention, which is then followed by a technical evaluation carried out by ILO's Department of Statistics.

Finally, adherence to international standards contributes to the standardization of terminology and definitions of statistical concepts such as "work," where its various interpretations by countries may lead to inconsistent or incorrect understandings and policy responses concerning labor migration. The 2013 ICLS Resolution concerning statistics on work, employment, and labor underutilization aims to set standards for work statistics. Paragraphs 60 and 61 of the Resolution recommend that "statistics of work should cover ... all persons who are usual residents of the country," including those who work outside the country, such as cross-border and seasonal workers, and be supplemented with "information about the employment characteristics of non-usual residents working in the national territory" (ICLS 2013).

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^{*}The complete list of cited references on labor migration and its data collection can be found at the end of Chapter 8.

Chapter 5

Study United Nations Educational, Scientific, and Cultural Organization²³

Key Policy Issues

Increasing numbers of people are migrating for educational reasons. This is evident in the share of internationally mobile students (or mobile students)²⁴ in the student population across all destination countries, but also in the significant increase in the number of internationally mobile students worldwide and the differing patterns of such mobility. According to the United Nations Educational, Scientific, and Cultural Organization (UNESCO) Institute for Statistics (UIS), the population of internationally mobile students at the tertiary level has almost quadrupled, from about 1.1 million in 1980 to more than 4.1 million by 2013.²⁵ The phenomenon of student mobility will most likely grow in magnitude for several reasons, including the search for high-quality education, internationally recognized qualifications, and better employment opportunities worldwide.²⁶

At the policy level, student mobility raises additional challenges that are specific to the education process. Developing adequate responses to these challenges should be an exercise entrenched in a human rights framework and, hence, should be shaped by relevant human rights standards and principles. The commitment to "leaving no one behind" as well as to the realization of all human rights enshrined

²³ This chapter was prepared by Tararas Konstantinos and Golda El-Khoury, UNESCO.

 $^{^{24}}$ The UNESCO Institute for Statistics defines "internationally mobile students" (or mobile students) as students who have crossed a national border and moved to another country with the objective of studying.

Detailed information on international flows of mobile students is available at: http://www.uis.unesco.org/Education/Pages/international-student-flow-viz.aspx. The data include only students who pursue a tertiary education degree or diploma outside their country of residence (so-called "degree mobility") and exclude students who are under short-term, for-credit study and exchange programs that last less than a full school year (so-called "credit mobility").

²⁶ For a brief discussion on international student mobility, see Migration and Tertiary Education, in Migration and Youth: Challenges and Opportunities published by the Global Migration Group, available at: http://www.globalmigrationgroup.org/sites/default/files/14_Chapter_11.pdf.

in the 2030 Agenda for Sustainable Development adds enormous political weight to the specific legal obligations deriving from relevant international instruments.²⁷

A first set of issues relates to the accessibility of education. Policy and regulatory frameworks should be creating equal opportunities for all and focusing on removing all discriminatory practices and other related obstacles preventing students who originate from abroad and are members of disadvantaged groups from receiving the education of their choice according to their capabilities. For instance, equal access should be ensured for female and male mobile students, and for mobile students belonging to specific national, ethnic, religious, or linguistic groups. Further, special measures (through scholarships, student loans, special accommodations and/or related subsidies, health insurance, and so forth) should be adopted to eliminate economic barriers and alleviate indirect costs, so as to enable the participation of mobile students from marginalized communities and poor population segments. Likewise, opportunities should be created for learners with special needs.

The recognition of qualifications and diplomas is another key determinant for admission to tertiary-level education, as well as to technical and vocational education and training (TVET) programs in destination countries. Given the marked variation across countries in the governance of foreign credential recognition, a main policy objective should be the establishment of a set of rules and procedures at the national level that are transparent and coherent. Policy frameworks should also address other issues that are relevant in this process, such as language and communication skills. Although the main responsibility lies with the authorities in the country of destination, the country of origin can greatly facilitate the process by removing eventual barriers on their side of the border. At the international level, the accession of countries to multilateral arrangements on foreign credential recognition, such as the six regional conventions under the auspices of UNESCO,²⁹ facilitates mobility by promoting quality assurance, as well as by reducing ambiguity and complexity, which often open the door to fraudulent practices.

Currently, UNESCO is leading two major initiatives on the cross-border recognition of qualifications. First, UNESCO is leading the process of preparing a global convention on the recognition of higher education qualifications. A drafting committee has been established to work on a preliminary draft. In addition to other benefits, the adoption of a universal instrument would have a positive impact on regions where

²⁷ The 2030 Agenda for Sustainable Development states, among others: "We envisage a world of universal respect for human rights and human dignity," paragraph 8, and "This is an Agenda which seeks to respect, protect and fulfil all human rights." The full text of the United Nations General Assembly Resolution 70/1 entitled *Transforming Our World: The 2030 Agenda for Sustainable Development* is available at: http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E.

²⁸ See Article 13 of the International Covenant on Economic, Social and Cultural Rights and the General Comment N°13 of the Committee on Economic, Social and Cultural Rights on the interpretation of this provision at: http://www.ohchr.org/en/hrbodies/cescr/pages/cescrindex.aspx.

²⁹ Namely, in Africa (1981), Arab States (1978), Arab and European States bordering on the Mediterranean (1976), Asia and the Pacific (2011), Europe (1997), and Latin America and the Caribbean (1974).

there is not an active regulatory framework.³⁰ A rapidly emerging complement to international, legally-binding instruments is the adoption of regional qualification frameworks. The frameworks describe qualifications in terms of workload, level, learning outcomes, competencies, and profiles. Adherence to such regimes is meant to promote comparability of qualifications and transparency, and thus facilitate the movement of learners and improve employability.³¹

Second, pursuant to a recommendation of the Third International Congress on TVET,³² UNESCO is spearheading the process of development of a set of world reference levels (WRLs). By providing a neutral and independent reference point against which a level of learning can be assessed, WRLs have the potential to facilitate the international recognition of TVET qualifications, thereby supporting the mobility of learners and workers, participation in the labor market, and lifelong learning. Drawing on the findings of a global study on the use of level descriptors for defining learning outcomes,³³ UNESCO launched a bottom-up process with the establishment of an expert group to connect key regional and international organizations³⁴ working in the field of recognition of qualifications, as well as to develop common guidelines in this area. The initiative also includes a monitoring function for the WRLs through the periodic production of a global inventory of regional and national qualification frameworks.³⁵

The issue of credential recognition as a necessary requirement for enrollment in an education program should be distinguished from the assessment of professional standards and related criteria for the purpose of registration or permission to practice a profession once the study cycle has been completed. However, there is an inherent correlation between the choice of an education program and the resulting patterns of study mobility on the one hand, and the transferability of skills obtained by that program and access to the labor market on the other.

A further challenge derives from the fact that monitoring the flow of internationally mobile students is a responsibility shared between education policy makers and tertiary education institutions, foreign affairs and interior ministries, as well as immigration officials, which may result in divergences on core issues. Hence, there is a need for policy frameworks that set unequivocal targets, establish a clear

³⁰ See the records of the 38th General Conference of UNESCO and the resolution on the preliminary report concerning the preparation of a global convention on the recognition of higher education qualifications: Document 38 C/Resolution 12, accessible at: http://unesdoc.unesco.org/images/0024/002433/243325e.pdf.

³¹ For information on frameworks of qualifications in the Europe and North America region: http://www.enic-naric.net/framework-of-qualifications-in-the-europe-and-north-america-region-new.aspx.

³² http://www.unesco.org/new/en/education/themes/education-building-blocks/technical-vocational-education-and-training-tvet/third-international-congress-on-tvet/.

³³ http://unesdoc.unesco.org/images/0024/002428/242887e.pdf.

 $^{^{34}}$ These include the Association of Southeast Asian Nations, the Caribbean Community, the Commonwealth of Learning, the European Commission, the Gulf Cooperation Council, the Pacific Community, and the Southern African Development Community.

 $^{^{35} \}quad http://uil.unesco.org/fileadmin/keydocuments/LifelongLearning/en/NQFInventoryVol1.pdf.$

division of labor, and promote coordination and interaction among actors across the board, with emphasis on the elimination of inequalities and discrimination.

Finally, an additional enabler for increasing the accessibility of national education systems to mobile students is the availability of adequate information, including on what the study visa requirements are, the conditions of admissions, how the foreign credential recognition regime is constructed, and what support is available for such students.

Data Needed to Analyze the Topic

A starting point for preparing national education systems for the arrival of international students and adapting the corresponding policy frameworks is the development of a good understanding of the global and regional trends in international student mobility. Statistics show that cross-border education patterns have shifted over recent years (for example, internationally mobile students have a wider choice of destinations and are more likely to study in other countries within their region of origin), and are likely to continue mutating under the influence of a host of factors. These include but are not limited to: demographics; economic growth and decline; the expansion of local tertiary education systems; immigration policies and regulatory environments of competing host countries; funding schemes for study abroad, tuition and fees, and so forth; and the emergence of technology-enabled alternatives like Massive Open Online Courses.

Furthermore, education planners should make available information on the profile of mobile students and its correlation with the probability of admission to the national education system and the granting of study visas. Data disaggregated by gender, migration status, national or ethnic origin, and socioeconomic status will be required. These data will allow assessment of the accessibility of the system, bringing to the forefront eventual patterns of discrimination and exclusion at any stage in the process. For instance, this information would be extremely useful in shedding light on cases where students admitted to a study program by a tertiary education institution failed to obtain a study visa. However, it is important to acknowledge the difficulty of collecting such data, as they are not necessarily compiled in an accessible way.

In addition, data should be provided on the number and profile (including country of origin) of internationally mobile students receiving financial (such as allowances, loans, and study grants) or other support, with the aim to ensure social protection and decent living conditions (for example, housing services, health insurance, and so forth). This will help to ascertain the effectiveness of the assistance schemes on offer and any eventual shortcomings. Recognizing precisely the importance of scholarship programs in internationalizing tertiary education and enhancing education opportunities for young people and adults, target 4.b of the Sustainable Development Goals calls for the significant expansion of scholarships to developing

countries for enrollment in higher education in developed countries and other developing countries.³⁶

To improve foreign credential recognition systems, data should be made available to shed light on the policy priorities that drive foreign credential recognition processes (skill migration selection purposes, work in regulated fields, and so forth), and the extent to which those considerations affect the recognition process and its outcomes. To ristance, data can be made available through the operation of relevant national information centers. It is also important to establish the range and level of functionality of bilateral/multilateral agreements related to migrants, as well as the scope of global foreign credential recognition partnerships and their effectiveness for origin and destination countries. Furthermore, to determine the degree of adaptability of education programs to labor market requirements, it would be useful to have information on the transferability of skills and recognition of foreign qualifications and diplomas, not only in the country of origin, but also in third countries.

Crucial information for furthering student mobility across countries includes data on governance-related questions. This information would allow an assessment of the interaction, coordination, and coherence among the institutions that have responsibilities in this domain and their effect on the accessibility of a country's education system to internationally mobile students. Opinion polls and surveys would be invaluable in highlighting students' perspectives on these matters. Such instruments would also be helpful in evaluating the availability and effectiveness of foreign credential recognition processes, student support schemes, and visa requirements.

Existing Sources and Standards for Data Collection

The UNESCO UIS, in partnership with Eurostat and the Organisation for Economic Co-operation and Development (OECD), gathers data on the mobility of tertiary-level international students and doctorate holders, to track trends in the mobility of these populations. The procedure for recording data on internationally mobile students involves destination countries collecting data on how many internationally mobile students study in their countries and where these students come from. These data are then compiled by UIS, which uses them to estimate the number of students from a given country who study abroad. UIS databases provide information

Target 4.b of Sustainable Development Goal 4, stipulates: "By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries." See at: http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E.

³⁷ See in Migration and Education: Quality Assurance and Mutual Recognition of Qualifications, Summary of Expert Group Meeting (Nine Country Audit) at: http://unesdoc.unesco.org/images/0017/001798/179851e.pdf.

about the distribution of mobile students by sex, destination and origin countries, and the types of programs in which students are enrolled and from which they graduate.³⁸ In addition, UIS has developed a set of eight indicators at the country level to assess student mobility, outbound and inbound, and highlight global and regional student flows. Furthermore, UIS produces the Mobility Dispersion Index, which reflects the extent to which mobile students from a given country are concentrated in a few destination countries or distributed among a larger group of countries. Finally, the project on the Careers of Doctorate Holders, developed by UIS, OECD, and Eurostat, focuses on doctorate-holders' transition to the job market, and is designed to guide governments in their national data collection by producing a "toolkit" consisting of methodological guidelines, a core model questionnaire, output tabulations, and supporting documents.³⁹

On foreign credential recognition, information is generated in relation to the implementation of the relevant regional normative instruments promoted by UNESCO. For instance, the European Network of National Information Centres (established by the Council of Europe and UNESCO) and the National Academic Recognition Information Centres in the European Union provide information on a joint website. The website provides up-to-date information on current issues in international academic and professional mobility, and on procedures for the recognition of foreign qualifications. The information is supplied and maintained by the competent bodies in each member country, and by each member organization. For Latin America and the Caribbean, the UNESCO International Institute for Higher Education in Latin America and the Caribbean has assumed a leadership role through initiatives such as the Enlaces project and the Observatory on Academic and Scientific Mobility, among many others. Finally, useful information on the same issue is produced as part of the regular monitoring of the 1993 UNESCO Recommendation on the Recognition of Studies and Qualifications in Higher Education.

Administrative records, which are compiled typically by the ministry of finance, ministry of education, or national statistical office, provide information on subsidies from government or other private entities to students, but these data are not necessarily disaggregated by mobile and non-mobile students.

³⁸ http://www.uis.unesco.org/Education/Pages/international-student-flow-viz.aspx.

³⁹ See the relevant UIS webpage at: http://www.uis.unesco.org/ScienceTechnology/Pages/doctorate-degree-holders.aspx.

⁴⁰ http://www.enic-naric.net/.

⁴¹ http://www.iesalc.unesco.org.ve/index.php?option=com_content&view=article&id=334&Itemid=292.

⁴² http://www.iesalc.unesco.org.ve/index.php?option=com_content&view=article&id=2478&Itemid=643.

⁴³ The implementation of the recommendation is entrusted upon the Committee on Conventions and Recommendations, which is a subsidiary of UNESCO's Executive Board. The most recent report of August 2014 is available at: http://unesdoc.unesco.org/images/0022/002292/229207e.pdf.

Data Gaps and Challenges

An area where concerted efforts are needed is the detailed mapping of international student mobility. Currently, not all countries collect information about international students' country of origin, and the lack of such information results in underreporting the number of students from a given country studying abroad.⁴⁴ Moreover, the available data do not always document students who are under short-term, for-credit exchange programs that last less than a full school year (so-called "credit mobility"). Important data gaps are observed in various aspects of accessibility to education programs outside one's country of origin.

Although data on internationally mobile students are often disaggregated by sex, additional information would be required to establish to what extent a national system grants equal opportunities to students coming from abroad, to identify potential patterns of discrimination and exclusion. Data on fees payable and available scholarships would be helpful in implementing Target 4.b (calling for the expansion of scholarships available to students from developing countries). However, the accessibility of such programs to disadvantaged groups (particularly women and girls; members of national, ethnic, religious, and linguistic minorities; and people living in relative poverty) seems to remain outside the purview of the proposed indicator linked to the monitoring of this target.⁴⁵

There is a shortage of transparent, reliable, and up-to-date data that could be the basis of comprehensive and coherent recognition regimes for foreign credentials. The availability of data on such regimes varies markedly by country (including the degree of access to national, regional, and regulatory body data to facilitate assessment of foreign credential recognition applications and outcomes), and by differences in candidate results by variables, including country of training, age, gender, the results of first compared with subsequent attempts, and overall outcomes in different fields. Similar data challenges affect the recognition of qualifications and competencies and the related national or regional frameworks of qualifications.

Sources of information covering a large array of matters related to the effectiveness of existing policy frameworks on student mobility that could be further exploited are surveys and opinion polls recording the perceptions of internationally mobile students. Among other issues, and in the absence of systematized information from other sources on financial support provided to mobile students, surveys could generate data on the type and amount of aid received by such students.

⁴⁴ See the following UIS webpage: http://www.uis.unesco.org/Education/Pages/FAQ.aspx#theme5.

⁴⁵ The indicator proposed for Target 4.b of the Inter-Agency and Expert Group on Sustainable Development Goal Indicators, which was agreed as a practical starting point subject to future technical refinement by the Statistical Commission at its 47th session in March 2016, is "Volume of Official Development Assistance Flows for Scholarships by Sector and Type of Study." See at: http://unstats.un.org/unsd/statcom/47th-session/documents/Report-on-the-47th-session-of-the-statistical-commission-E.pdf and http://unstats.un.org/unsd/statcom/47th-session/documents/2016-2-IAEG-SDGs-Rev1-E.pdf.

Good Practice

Only a few countries gather data on inbound international students and outbound national students, despite that most governments maintain data on inbound international students. Malaysia's data collection serves as an example of good practice. Like many countries, the Malaysian government compiles data on inbound international students (country of origin and type of program) from the enrollment and graduation records of individual universities (public and private) and institutions.

For Malaysian students who study abroad (government-sponsored and self-financed), the Ministry of Education gathers data mainly from two sources. First, the Education Malaysia Division in individual destination countries compiles information about Malaysian students enrolled in that country and reports to its Ministry of Education. In countries where there are no representatives from the Education Malaysia Division, enrollment data are gathered from the Malaysian Embassy. The embassy in each host country maintains its own database on Malaysian students who study abroad, to monitor the health and safety of national students. The Ministry of Education in Malaysia then compiles and disseminates the data in its annual education statistics.

At the international and regional levels, the UNESCO, OECD, Eurostat education data collections yield a unique data set designed to examine mobility trends from the perspective of countries sending and receiving students at the tertiary level. Because most countries do not gather data on where their national students go to study, this data set is useful for tracing where and in what kinds of programs national students obtain their tertiary education degrees or certificates abroad. In addition to degree mobility, Eurostat collects data on credit-mobile students, as a tool to evaluate student mobility, which is high on the agenda of the European Higher Education Area.

Finally, the Groningen declaration initiative 46 seeks to connect digital student data depositories worldwide (with signatories in 19 countries thus far), and create a relevant ecosystem that would ensure the portability of student data and thereby foster academic and professional mobility.

Key Messages and Recommendations to Address Gaps

In view of the considerations described in this chapter, several short—and long-term actions could be undertaken by associated agencies at the national and international levels in different, but connected, fields, such as education and immigration. These actions could be carried out by other key stakeholders, such as schools/universities and research institutions, to fill data gaps and address key policy issues adequately:

⁴⁶ See the text at: http://www.groningendeclaration.org/.

- Support (through the development of appropriate measurement tools, capacity-building, and advocacy) the establishment of comprehensive data collection mechanisms in destination and origin countries to track mobile students and identify their profile through an appropriate disaggregation of data. (Specific target: national agencies in charge of education statistics in origin and destination countries.)
- Systematize the collection of data, in destination and origin countries as appropriate, on the financial support as well as any assistance (for instance, social security and health coverage, counselling, and so forth) provided to internationally mobile students, and the profile of recipients. (Specific target: national agencies in charge of student mobility in origin and destination countries, and national agencies in charge of education statistics in origin and destination countries.)
- Build on available mechanisms, including national censuses (already several
 countries obtain information about mobile students through censuses), and
 use such instruments as surveys and opinion polls to generate information on
 the perceptions of internationally mobile students on several accounts, with
 emphasis on the accessibility of the education system of the destination country
 and the adequateness of the support provided to the most disadvantaged.
- Advocate for origin countries to establish data collection mechanisms on their citizens who study abroad, using, as some countries already do, their network of embassies and consulates in destination countries, wherever available.
- Invest in the collection of reliable data on approaches and good practices for foreign credential recognition regimes, including in the area of TVET,⁴⁷ especially on the implementation of relevant bilateral/multilateral arrangements, while exploring learners' records databases.⁴⁸ (Specific target: education and labor ministries across the world.)
- Contribute to the development and global sharing of comprehensive databases related to migration-relevant country education systems (covering structure, framework, governance, quality assurance procedures, and so forth).⁴⁹

⁴⁷ An important role could be played in this regard by the UNESCO-UNEVOC Network, a worldwide network of TVET institutions. See at: http://www.unevoc.unesco.org/go.php?q=UNEVOC+Network+-+Home.

⁴⁸ For instance, by building on such initiatives as the Groningen Declaration. See supra note 26.

⁴⁹ See supra note 15, p. 22.

Chapter 6

Humanitarian (Refugees, Asylum-Seekers, and Stateless persons)

United Nations High Commissioner for Refugees⁵⁰

Key Policy Issues

The 17 Sustainable Development Goals (SDGs) and 169 targets were agreed to on the premise that "no one is left behind" in their implementation. The Declaration accompanying the SDGs makes specific reference to migrants, refugees, and displaced persons as their beneficiaries. The SDGs therefore reinforce the state's responsibilities to provide protection and extend a full range of social and economic rights to those found to be in need of international protection, as enshrined in the 1951 Refugee Convention. The aim of this chapter is to provide guidance on the collection, analysis, and use of data on key issues related to refugees' access to asylum and protection.

Considerations Related to Refugees' Access to Protection

The vast majority of refugees, asylum-seekers, and stateless people (boxes 6.1, 6.2, and 6.3) escaping conflict and persecution seek safety in neighboring countries; some travel further afield to find asylum and protection. Irrespective of where they move, refugees require specific protection and safeguards, for which an established legal framework exists in the form of the 1951 Refugee Convention and its 1967 Protocol. The consequences of refugees not receiving that protection can be life-threatening.

Increasingly, situations of large-scale refugee movements alongside migrants are presenting new challenges for refugees and states. Responses to refugee and migrant movements have included border closures, carrier sanctions, and interception and "pushbacks" of people at border points. The complexity of the refugee situation increases the need for timely and accurate information and data at all stages of the movement.

⁵⁰ This chapter was prepared by Sumbul Rizvi, Katja Susanna Rytkoenen and Stefanie Ruehl, UNHCR.

BOX 6.1 Refugees

Refugees flee due to compelling reasons related to conflict or persecution.

The United Nations Convention relating to the Status of Refugees, adopted in 1951, and its 1967 Protocol define the term "refugee" to apply to any person who:

"owing to well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country; or who, not having a nationality and being outside the country of his former habitual residence as a result of such events, is unable or, owing to such fear, is unwilling to return to it."

The 1951 Convention and the 1967 Protocol are further complemented by national and regional refugee and subsidiary protection regimes.^a Under international law, a person is considered a refugee (and so entitled to certain protections) as soon as they meet the relevant criteria, regardless of whether they have received formal recognition as a refugee. A person does not become a refugee because of recognition, but rather is recognized *because* they are a refugee.

a. See Organization of African Unity (now African Union) Convention governing the Specific Aspects of Refugee Problems in Africa 1969, adopted in Addis Ababa on September 10, 1969, which extends the compelling reasons for flight to external aggression, occupation, foreign domination, or events seriously disturbing public order; the European Union Council Directive 2004/83/EC of April 29, 2004, on minimum standards for the qualification and status of third-country nationals or stateless persons as refugees or as persons who otherwise need international protection and the content of the protection granted, Official Journal L 304, 30/09/2004 P. 0012–0023; the Cartagena Declaration on Refugees, adopted at a colloquium held at Cartagena, Colombia, November 19–22, 1984. Although it is nonbinding, the Cartagena Declaration also sets out regional standards for refugees in Central America, Mexico, and Panama.

BOX 6.2 Asylum-Seeker

An asylum-seeker is someone whose claim has not yet been finally decided by the United Nations High Commissioner for Refugees or the authorities of the country in which she or he has sought refugee status. Not every asylum-seeker may ultimately be recognized as a refugee. All asylum-seekers and refugees are protected by the "principle of non-refoulement," that is, protection against return to a country where a person has reason to fear persecution.³

a. The most essential component of refugee status and asylum is protection against return to a country where a person has reason to fear persecution. This protection has found expression in the principle of non-refoulement, which has been defined in several international instruments relating to refugees, at the universal and regional levels. The 1951 United Nations Convention relating to the Status of refugees provides in Article 33(1) that: "No Contracting State shall expel or return ("refouler") a refugee in any manner whatsoever to the frontiers of territories where his life or freedom would be threatened on account of his race, religion, nationality, membership of a particular social group or political opinion."

BOX 6.3 Stateless Person

A stateless person is an individual who is "not considered as a national by any State under the operation of its law," and consequently lacks the protections flowing from citizenship.^a This definition describes a particular type of statelessness known as de jure statelessness, which is characterized by the formal, legal lack of a nationality. However, the problem of statelessness also extends to persons who formally hold a nationality, but are nonetheless in a situation similar to statelessness because that nationality is ineffective. Such individuals are commonly referred to as de facto stateless.^b

Statelessness often impinges the enjoyment of rights and alienates the persons from full contribution to the development of the society. Most stateless persons in a migratory context face acute challenges in obtaining travel and civil documentation and are therefore particularly vulnerable, including to detention in transit and receiving countries.

Statelessness may also be an underlying cause of migration and at the same time migration itself can result in statelessness. Sometimes statelessness is also linked to persecution, which means that the persons concerned are simultaneously refugees.

- a. Article 1 of the 1954 Convention relating to the Status of Stateless Persons sets out the criteria for statelessness in international law. See UN High Commissioner for Refugees (UNHCR), Guidelines on Statelessness No. 1: The definition of "Stateless Person" in Article 1(1) of the 1954 Convention relating to the Status of Stateless Persons, February 20, 2012, HCR/GS/12/01, available at: http://www.refworld.org/docid/4f4371b82.html.
- b. Unite Nations High Commissioner for Refugees, Statelessness: An Analytical Framework for Prevention, Reduction and Protection, 2008, available at: http://www.refworld.org/docid/49a28afb2.html.

Considerations Related to Refugees' Access to Development Opportunities

Data collection and analysis are essential to understand, assess the extent of, and develop appropriate and timely responses to the physical and legal protection concerns of refugees and asylum-seekers, as well as to identify sustainable solutions. The need for solutions for the increasing number of refugees living in protracted displacement situations is more critical than ever. This includes the provision of opportunities for self-reliance and integration during forced displacement, as well as successful identification of durable solutions.⁵¹

Refugee displacement impacts growth, employment, and public spending for countries of origin and destination. Finding solutions to protracted displacement requires rethinking and can be addressed to some extent through the recognition that refugees are people with skills, potential, interests, and aspirations. Livelihood activities help refugees to transition away from dependency toward increased resilience and self-reliance, which can alleviate pressure on countries of asylum. Lack of livelihood opportunities can inversely heighten threats to personal security, such as exploitation and abuse, development of negative coping strategies, child labor, and marginalization of older persons or persons with disabilities.

Refugees can have positive development impacts on host countries. Recent studies point to the contribution of refugees to the national economy in countries where they have significant freedom of movement and right to work.⁵² This access is especially important in the context of increasingly protracted refugee situations. Access of forcibly displaced persons to labor mobility opportunities can lead to significant gains.⁵³ Refugees are better prepared for solutions to their situation when they maintain their independence, develop their skills, and are not required to rely solely on humanitarian assistance. Commercial organizations in refugee-hosting countries can improve their competitiveness by sourcing required skills from a larger pool, while economies can alleviate human capital shortages and benefit from innovation and skills transfer. As with migrant groups, remittances sent back play an important role in securing the livelihoods of those left behind, and can play an important role in the recovery.

Evidence suggests that providing refugees with opportunities to use their skills and potential is not only in the interest of the individuals concerned, but also of

⁵¹ The three classic durable solutions in refugee situations are local integration in the place of asylum; voluntary repatriation to country of origin; and, in some instances, third-country resettlement.

Fefugee Studies Centre, Refugee Economies: Rethinking Popular Assumptions, August 14, 2014, available at: http://www.refworld.org/docid/53ecb10b4.html. A literature review on existing case studies for displacement due to conflict and widespread human rights violations as well as "Guidelines for Assessing the Impacts and Costs of Forced Displacement" were developed in 2012 by Roger Zetter and his team for the World Bank.

⁵³ Labor mobility for the purposes of this guidance includes the authorized onward movement of refugees from countries of asylum to third countries to pursue employment, as well as employment opportunities for refugees in asylum countries on the basis of labor migration schemes.

governments. However, labor mobility does not replace refugee protection through migration, although it can be a component of a protection and solutions strategy. Further research on the development impact of forced displacement from the point of view of the individual, host, and country of origin would assist in gathering best practices in devising a response to forced displacement situations in a global context where forced displacement is at an all-time high.

Data Needed to Analyze the Topic

Monitoring Refugees' Access to Protection

Refugee protection begins with access to asylum. In tangible terms, this is assessed through the ability of asylum-seekers and refugees to obtain safe access to territory. Access to asylum processes and mechanisms forms part of the process of delivery of refugee protection.

Individual registration is a fundamental component of international refugee protection, and identifies refugees and asylum-seekers as an individual of concern to the United Nations High Commissioner for Refugees (UNHCR) and to the asylum state. In addition, registration information is useful for planning, timely delivery of adequate assistance, as well as the identification of appropriate durable solutions. As a data management activity, registration consists of several interrelated activities, including identification, identity management, as well as data management and exchange. The collection of refugee data through registration, including its storage, update, and management, is a continuing process.

In practice, registration helps to protect against refoulement (box 6.4), arbitrary arrest, and detention by identifying the individuals and making them known to the host government, UNHCR, and other stakeholders, as persons of concern. This helps individuals and families gain access to basic rights and services. Accurate registration—including of children—helps to provide an identity; facilitate access to education, food, and health services; ensure family unity; and trace the families of unaccompanied and separated children. Registration can thus foster freedom of movement and minimize dependence. Regular updating of registration records helps in the reconciliation of records on changes in the refugee population, and ensures that registers are updated with information about progress toward the achievement of solutions.

Information on refugees, their locations, demographics, and even education and skills helps in the design, implementation, and evaluation of policy responses and programmatic interventions. It is important to understand that the nature of programmatic interventions and policy responses will have a direct impact on the protection of refugees, asylum-seekers, and stateless persons. The collection of qualitative and quantitative data can be helpful in understanding the complexities of the movements of refugees and asylum-seekers.

BOX 6.4 Non-Refoulement

The most essential component of refugee status and asylum is protection against return to a country where a person has reason to fear persecution. This protection has found expression in the legal principle of *non-refoulement*, which is widely accepted by states and defined in several international instruments relating to refugees, at the universal and regional levels. On the universal level, the 1951 United Nations Convention relating to the Status of Refugees prohibits refugees and asylum-seekers from being expelled or returned in any manner whatsoever "to the frontiers of territories where [their] life or freedom would be threatened on account of [their] race, religion, nationality, membership of a particular social group or political opinion" (Article 33(1)). This refers not only to the country from which a person has fled, but also includes any other territory where they would face such a threat.

Accurate, up-to-date data can assist in assessing the scale of and trends in refugee movements. Data on the protection risks faced by refugees and stateless persons en route to safety are also considered an important protection tool. If such information is collected in a timely and appropriate manner, it can facilitate interventions aimed at minimizing the risks faced by persons in need of international protection. The risks of trafficking in human beings, abuse, exploitation, and violence from smugglers and other criminal networks can be significantly reduced through active collaboration among states and other stakeholders, complemented by real-time and accurate data and analysis on trends.

Monitoring Refugees' Access to Development Opportunities

Information obtained through registration assists in analyzing the possibilities for refugees to access labor mobility opportunities. Research on such opportunities should include an inventory and analysis of existing state practices and employment-related movements of refugees, current obstacles for refugees to access existing labor schemes, as well as research on labor market needs. This research should include analysis of national and regional laws, regulations, and procedures on refugees' freedom of movement, stay and residence, right to work, onward movement, and local integration, including naturalization. Furthermore, research on the possibilities to enhance self-reliance implies looking not only at vulnerabilities, but also at ways to enable individuals to make the most of their education, skills, and resources.

The following are some of the emerging questions that need to be addressed:

 Assessment of the costs and benefits of refugees living in camps as opposed to taking up residence in host communities to live with greater dignity, independence, and normality

- Investigation of how new partnerships for self-reliance between refugees and host communities can be leveraged and fostered
- The scope for global and regional responsibility-sharing when there are gaps in protection and humanitarian assistance for those forcibly displaced
- Ways to bridge the gap between humanitarian assistance and development cooperation and integrate the forcibly displaced more systematically into development planning.

Existing Sources and Standards for Data Collection

In October 2001, UNHCR's Executive Committee issued Conclusion No. 91 on Refugee Registration. The Conclusion reaffirms the importance of registration as a protection tool and sets certain basic guidelines for all registration processes:⁵⁴

- Registration should be a continuing process that records essential information at the time of initial displacement, and as changes in the refugee population (such as births, deaths, new arrivals, and departures) occur.
- Registration processes should adhere to the fundamental principles of confidentiality.
- Registration should be easily accessible and take place in a safe and secure location.
- Registration should be conducted in a nonthreatening and impartial manner, with respect for the safety and dignity of refugees.
- Personnel conducting the registration should be adequately trained, and registration teams should include an adequate number of female staff.
- Whenever possible, refugees should be registered individually and the following
 information should be recorded: identity document and number, photograph,
 name, sex, date of birth (or age), marital status, special protection and assistance
 needs, level of education, occupation (skills), household (family) size and
 composition, date of arrival, current location, and place of origin.

Translating that policy into practice, a "unified approach" to registration was developed. The UNHCR Handbook for Registration,⁵⁵ released in 2003, offers detailed and accessible information on how to set up registration activities, what data should be collected, and how to manage and protect the information gathered. The Operational Standards for Registration and Documentation,⁵⁶ published in December 2007, summarizes this core methodology, which is applicable in most

Unite Nations High Commissioner for Refugees, Conclusion on Registration of Refugees and Asylum-Seekers, October 5, 2001, No. 91 (LII) - 2001, available at: http://www.refworld.org/docid/3bd3e1d44.html.
 UNHCR Handbook for Registration, September 2003, available at: http://www.refworld.org/docid/3f967dc14.html.

⁵⁶ UNHCR, Operational Standards for Registration and Documentation, December 2007, available at: http://www.refworld.org/docid/4ae9ac8f0.html.

of the situations in which refugees and other persons of UNHCR's concern are assisted. Instead of using different approaches to registration in camp and urban situations, the unified approach describes a common set of standards and data that vary only in the level of detail from one scenario to another, as well as how to achieve a living profile of the population, which remains an effective tool for protection. This unified approach to registration helps to ensure better protection and identify appropriate, durable solutions for refugees and stateless persons.

Information on existing state practices and employment-related movements of refugees may be obtained through migrant rights mechanisms and labor protection bodies in the countries; national employment agencies or a national agency that deals with small and medium-size enterprises; and government, regional organizations, and nongovernmental organizations. However, within the boundaries of established data protection principles and with the consent of the refugee concerned, only non-identifying information regarding refugee population profiles may be shared.⁵⁷

Data on refugees, asylum-seekers, and stateless persons may also be available from sources such as screening, national censuses, administrative data sources maintained by immigration and asylum authorities (for example, residence permit statistics), surveys, or population registers. However, the option for stateless persons to identify themselves as such in national censuses is often not available, and reasons for migration, including the option to select international protection or displacement-related reasons, tend to be rather limited. National authorities who, in the majority of countries, are involved in refugee registration, possess ample primary and secondary data that may be available and ready for analysis. Qualitative data that capture feelings, motivations, personal experiences, attitudes, and intentions can be obtained from sources such as focus group discussions, interviews, narrative texts, and reports. The collection of data using a range of different methodologies (such as primary, secondary, qualitative, and quantitative) ensures that accurate and comprehensive information is obtained about a particular situation, and that the response to that displacement situation is appropriate. This is the usual methodology adopted by UNHCR field offices around the world.

Data Gaps and Challenges

Forced displacement impacts human and social capital, income, employment, assets, access to natural resources, health, security, and gender relations. Only fairly recently have studies started to look at refugees as economic agents, and more literature on the development impact of forced displacement is needed. Although it is increasingly recognized that human mobility provides an important

⁵⁷ To mitigate data protection and confidentiality risks, UNHCR recently issued a new Data Protection policy, which UNHCR operations must respect (*Policy on the Protection of Personal Data of Persons of Concern to UNHCR*, May 2015, available at: http://www.refworld.org/docid/55643c1d4.html). The processing of other data, aggregated or anonymized, does not fall within the scope of this policy, but is covered by UNHCR's Information Classification, Handling and Disclosure Policy.

means for people to contribute to the economic and social life of their countries of origin and destination, solutions to forced displacement often focus on containing or reversing such mobility.

Although about 86 percent of the world's refugees are hosted in fragile or low-income countries where they have only limited opportunities to meet their own essential needs, mobility is generally incorporated into response strategies to forced displacement situations in the form of organized third-country resettlement. However, there are very limited available places for resettlement, falling far below the existing needs. Nonetheless, mobility leading to voluntary return to country of origin or habitual residence, upon cessation of the conflict or persecution that led to flight, is another important option and is often demonstrated by refugees "voting with their feet" in their effort to voluntarily and spontaneously return home when they feel it is safe to do so.

The collection of data on forced or mixed movements where refugees move alongside migrants can be challenging. Travel is often clandestine, and even data on regular movements may be scarce. Modern migratory patterns can render the identification of individuals who require international protection difficult, as they often travel alongside migrants moving for work or other reasons. Some of the practical challenges in registration are related to security and confidentiality, maintaining the registration data up to date, and recognizing the possible limitations of registration data. An effective approach is the use of mobile teams to register persons of concern who, for various reasons (for example, where individuals are hospitalized, arrested, or are elderly persons) cannot attend the registration center(s); however, this is a highly resource intensive approach. Therefore, centralized registration systems that include mobile registration for particular groups are more sustainable. Mixed movements of refugees and migrants due to differing motivations further complicate the efforts to gather data.

The collection of data on refugees in complex mixed migration flows with new and shifting routes poses a particular challenge. Irregular displacement routes change rapidly, and are often directly related to the changing policies of transit and receiving countries. The lack of information on irregular movements, and the political economy around smuggling and trafficking, lead to gaps in the understanding of overall displacement dynamics. Joint initiatives between different agencies, such as the Regional Mixed Migration Secretariat in Africa and the Regional Mixed Maritime Migration Unit in Southeast Asia, have been established to enhance coordination and the compilation of data and information from different sources to enable trend analysis and inform programmatic responses.

The various international, national, and nongovernmental organizations that gather data on migratory movements often do so independently, to meet their own objectives. They may use varying definitions, criteria, and parameters, making it difficult to disaggregate, share, or compare data without distorted results. Collecting

comparable data and establishing agreements on data collection and analysis in collaboration with different actors can address these challenges.

Refugee emergencies are characterized by a mobile population, often with rapidly fluctuating numbers. It may be difficult to collect exact information on the total number and composition of the population, reducing the registration of people into an approximate headcount or by household. Given the difficulties in estimating the size and characteristics of an irregular population, using a combination of information sources can assist in obtaining reasonably accurate estimates.

A case in point is the widely-reported trend of refugee and migrant movements across the Mediterranean. Although those who make it across the sea through the arduous journey may have the opportunity to be registered, there are many others who embark on these risky journeys and never make it ashore. There are limited data on such embarkations and casualties, especially in the context of sea movements. This important gap in data collection is prevalent across the world, including in the Asia Pacific, Southeast Asia, Caribbean, and Gulf of Aden regions. A related gap is the limited availability of information on the basic protection challenges faced by men, women, girls, and boys in the context of onward movements. Inadequate information hinders appropriate response strategies, which could be adopted to address protection risks.

Similarly, an accurate global count of stateless persons remains unachieved. The widely different interpretations of the definition of "stateless person" further hamper the identification of stateless individuals, and contribute to statelessness remaining a hidden problem.

In view of the dynamic character of forced displacement and the fluid nature of onward movements, continuous and extensive data gathering is required throughout the displacement cycle to ensure an appropriate response. Any operational system must be structured as an integrated population information management tool, covering the full "refugee cycle," from initial displacement to durable solutions. Where data exist, gaps remain, notably in the disaggregation of existing data on the movements of refugees, asylum-seekers, and stateless persons by gender, age, and nationality.

Good Practice

Thematic tools include the following:

UNHCR, UNHCR Handbook for Registration, September 2003, http://www.refworld.org/docid/3f967dc14.html

UNHCR, Operational Standards for Registration and Documentation, December 2007, http://www.refworld.org/docid/4ae9ac8f0.html

- UNHCR, Registration Checklist in Refugee Emergency Operations, January 2015, http://data.unhcr.org/imtoolkit/chapters/view/registration-in-emergencies/lang:eng
- UNHCR Emergency Handbook—Emergency Registration, May 2015, https://emergency.unhcr.org/entry/52547/emergency-registration#2,1436179772306
- UNHCR, Measuring Statelessness through Population Census. Note by the Secretariat of the United Nations High Commissioner for Refugees, May 13, 2008, ECE/CES/AC.6/2008/SP/5, http://www.refworld.org/docid/4a705e4b2.html
- UNHCR, Policy on the Protection of Personal Data of Persons of Concern to UNHCR, May 2015, http://www.refworld.org/docid/55643c1d4.html
- Chapter 2 in UNHCR, Refugee Protection and International Migration: The 10-Point Plan in Action, February 2011 (http://www.refworld.org/docid/4d9430ea2.html) provides examples of positive data collection experiences worldwide, including an example of good practice in Somalia through the Population Movement Tracking Initiative since 2006.

Good practice for operationalizing data collection and analysis in refugee-related contexts includes the following:

- Planning the purpose and scope of the data collection exercise; developing the necessary tools and guidelines; and clearly defining the objectives, methodology, confidentiality, and data protection safeguards before the data collection exercise commences
- Identifying the categories of data to be collected to include all components relevant to mixed movements, including refugee-related questions
- Developing databases to store data systematically
- Compiling other relevant primary or secondary data, including by collating data from various institutions at the national level (for example, population censuses, surveys, and interviews)
- Ensuring that the data are accurate, relevant, and up-to-date
- Analyzing the data and cross-tabulating the key variables to anticipate travel routes, entry and transit points, onward movements, and potential protection needs
- Improving communication channels between relevant stakeholders for data sharing, exchange of statistical non-personal data, and establishment of data-sharing agreements
- Developing mechanisms to ensure that the data collected by different stakeholders are comparable
- Ensuring that before a data collection exercise commences, its objectives, scope, methodology, and *data protection safeguards* are clearly established, recognizing that the confidentiality of refugee and asylum-seeker data is paramount, as it can have a direct impact on their protection

- Recognizing the relevance of factors such as the national and regional context, as well as existing research and data on migration and refugee-related issues, and that international migration data can be used to extrapolate the number of persons in need of international protection in a given country, or the data on refugees can serve as a baseline to estimate the global number of persons on the move⁵⁸
- Including safeguards, which are necessary in data collection and data sharing to preserve the privacy, confidentiality, and security of personal information in accordance with data collection standards.

Data on mixed movements of refugees and migrants may be collected through individual interviews, censuses, registers, administrative records, and surveys. Given the difficulties in estimating the size and characteristics of an irregular population, using a combination of information sources can assist to obtain reasonably accurate estimates.

⁵⁸ For instance, the United Nations Population Division uses UNHCR's refugee flow data as a proxy to estimate the global stock of migrants in countries where national migration data sources are weak or nonexistent (in Africa in particular).

Part 3 Migration and Development

Chapter 7

Remittances

World Bank⁵⁹

Key Policy Issues

Remittances have a special place among the tangible benefits of migration for origin countries. Migrants often share their increased income with their family back home. In 2016, remittance flows to developing countries reached \$442 billion, more than three times the size of official development assistance (figure 7.1) (World Bank 2016b). Excluding China, remittance flows to developing countries also significantly exceed foreign direct investment flows. In 2015, remittances to the Arab Republic of Egypt were four times the size of the country's revenues from the Suez Canal. In most small island nations and countries such as Tajikistan, Nepal, and Haiti, remittances amount to nearly one-third of gross domestic product. Unlike official aid, which must go through official agencies, remittances flow directly to the families of migrants and therefore are arguably more efficient in meeting the needs of the recipients. And unlike private capital flows, which tend to be highly cyclical, remittances are relatively stable and often consumption-smoothing—that is, they act as insurance for families during economic crises—as in Mexico and the Philippines—and following natural disasters—as in Nepal after an earthquake, Central America after a hurricane, or the Philippines after a typhoon. Remittances also have strong stabilizing effects on macroeconomic volatility, by financing current account deficits (Ratha 2003).

Remittances are a great way to share prosperity between different places. Remittances can reduce the level of poverty by directly augmenting the incomes of poor households. By raising aggregate demand, they increase the employment and wages of the poor. A cross-country study of 71 developing countries found that a 10 percent increase in per capita international remittances produced a 3.5 percent decline in the share of people living in poverty (Adams and Page 2005). Evidence from Latin America, Africa, South Asia, and other regions suggests that remittances reduce the depth and severity of poverty, while indirectly stimulating

⁵⁹ This chapter was prepared by Dilip Ratha and Sonia Plaza, World Bank with contributions of Christian Eigen-Zucchi, Carlo Corazza and Marco Nicoli

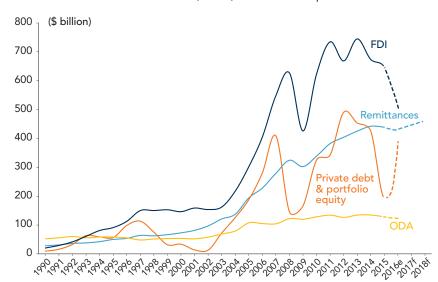


FIGURE 7.1 Trends in Remittances, ODA, and Private Capital Flows

Sources: World Development Indicators; World Bank Migration and Remittances Unit.

Note: FDI = foreign direct investment; ODA = Official Development Assistance; pvt = private; port =portfolio.

economic activity (Adams 1991; Lachaud 1999; Fajnzylber and Lopez 2007; Adams 2006b; Gupta, Pattillo, and Wagh 2007; Anyanwu and Erhijakpor 2010; Ajayi et al. 2009). Were it not for remittances, the share of the poor in the population would have been 4 percentage points higher in Nepal, 5 percentage points higher in Ghana, 10 percentage points higher in Bangladesh, and 11 percentage points higher in Uganda (Adams and Page 2005; Acosta et al. 2008; World Bank 2012; World Bank 2016a).

Although remittances are spent primarily for consumption, especially in the case of poorer households, remittances also provide funds for education, health, and business investments in many poor countries, as indicated in household surveys in Burkina Faso, Ghana, Nigeria, Senegal, and Uganda. Plaza, Navarrete, and Ratha (2011) show that the share of remittances spent on consumption (food, clothing, and rent) ranges from more than 56 percent in Senegal to less than 15 percent in Nigeria. Conversely, spending on education, health, and investments accounts for 43 percent of remittances in Senegal and 85 percent in Nigeria. In general, spending on education, health, and investments tends to be higher in the case of remittances from outside Africa than in the case of intraregional remittances.

In 2016, remittance flows to low—and middle-income countries were projected to reach \$442 billion, marking an increase of 0.5 percent over 2015. The modest recovery in 2016 was largely driven by the increase in remittance flows to Latin

America and the Caribbean, on the back of a stronger economy in the United States; by contrast, remittance flows to most developing regions declined or recorded a deceleration in growth.

Each of these three areas—volume of remittances, cost of sending remittances, and impact of remittances on development—present data challenges. These challenges need to be overcome to devise policies and address key questions such as:

- What is the magnitude of remittances?
- What are the prospects for remittance flows?
- How do remittances respond to shocks, in the receiving country or the countries from where they are sent?
- How do remittances facilitate financial inclusion, micro-insurance, and other financial products?
- How can the costs of remittances be reduced?
- What are the legal and regulatory systems for remittance markets, including Anti-Money Laundering and Counter Financing of Terrorism (AML-CFT)?

To address these questions, reliable data are needed that are consistent and up-todate, and can support deeper analysis in support of the policies and initiatives that would most effectively leverage remittances for development.

Data Needed to Analyze the Topic

In addition to continually improving data on migrant stocks around the world, good data are needed on the aggregate remittance flows, magnitude of flows by corridor, cost of making remittances, and the amounts sent at each price. Further survey data would also be invaluable in illuminating questions around the impact of remittances at the household level. Some data are available, but significant gaps remain. Remittance prices have found a prominent place on the international agenda, and are included in the Sustainable Development Goals as goal 10c. Data on the cost of sending remittances continue to expand through the Remittance Prices Worldwide (RPW) databases, as well as regional and national databases. Still, information on how much is sent at each price is limited, and it would be useful to gather data on how changes in remittance prices affect various groups of migrants, depending on their income levels and propensities to send remittances. Efforts to make progress in these areas form a broad agenda for improving the evidence base on the critical issue of remittances and development.

⁶⁰ The RPW database is available at: http://remittanceprices.worldbank.org/en.

Existing Sources and Standards for Data Collection

Aggregate Remittance Flows

The primary source of data on remittances comes from the balance of payments, estimated by central banks at the national level and compiled by the International Monetary Fund (IMF). A new notion of remittances was introduced in the Sixth Edition of the IMF Balance of Payments and International Investment Position Manual (BPM6).⁶¹ The manual was released in 2009, and its application is widening steadily across countries. According to the new definition, personal remittances are the sum of two main components: "compensation of employees" and "personal transfers" (table 7.1). Personal remittances also consist of a third item: "capital transfers between households," but data on this item are difficult to obtain and hence reported as missing for almost all countries.

The definition of "personal transfers" (box 7.1) is broader than the previous category of "worker remittances" —it comprises "all current transfers in cash or in kind made or received by resident households to or from nonresident households." ⁶² According to the IMF's remittance data compilation guide, unlike worker remittances, "personal transfers are defined independently of the source of income of

TABLE 7.1 Mapping Remittances from BPM5 into BPM6

Total remittances: a+b+c+d						
Personal remittance	s: a+b+c					
a	b	С	d			
Personal transfers (part of current transfers)	Compensation of employees less taxes, social contributions, transport, and travel	Capital transfers between households	Social benefits			

Source: IMF 2009a.

Note: BpM = IMF Balance of Payments and International Investment Position Manual.

These components spanned different parts of the balance of payments, prompting a revision in BPM6.

⁶¹ IMF 2009a.

⁶² Under BPM5, remittances were made up of three components:

Compensation of employees comprises wages, salaries, and other benefits earned by individuals—in economies other than those in which they are residents—for work performed for and paid for by residents of those economies.

Workers' remittances cover current transfers by migrants who are employed in new economies and
considered residents there. A migrant is a person who comes to an economy and stays there, or is
expected to stay, for a year or more. Workers' remittances often involve related persons.

Migrants' transfers are contra-entries to the flow of goods and changes in financial items that arise from the migration of individuals from one economy to another.

BOX 7.1 Examples of What Is, and What Is Not, Classified as Personal Transfers

Money sent to family in the country of the origin for the family's current needs, such as food, clothing, and education expenditures, as well as other current needs, is classified as remittances.

Personal transfers. In some cases, investment transactions by migrants may be vehicles for the provision of remittances, notably when relatives enjoy access to resources or benefit from the use of fixed assets. When migrants deposit funds in their accounts in their country of origin, and relatives have access to these funds, their withdrawals are personal transfers. For joint accounts, as a statistical convention, a transfer can be recorded when the funds move across borders rather than when they are withdrawn.

Not personal transfers. Migrants frequently invest in their country of origin, whether they intend to return eventually or have left permanently. Such investments can take numerous forms, but financial investments (notably bank deposits and portfolio investments) and investments in real estate are probably the most common. Small enterprises, located in the country of origin and sometimes managed by relatives, are another form of investment. These transfers are not considered remittances.

the sending household, the relationship between the households, and the purpose for which the transfer is made." This approach "simplifies the definition and brings it in line with compilation practices applied in many economies (which did not take account of factors such as source of income and purpose)." Therefore, "although it is recognized that personal transfers will often originate from migrants sending resources to support their relatives in their economy of origin, personal transfers as defined in this Manual are not limited to such activity."

Turning to the category "compensation of employees" (box 7.2), this is unchanged from BPM5. Such compensation "represents remuneration in return for the labour input to the production process contributed by an individual in an employer-employee relationship with the enterprise."

To ensure the consistency of the time series, the IMF continues to publish workers' remittances as a supplementary item. The central banks of some countries, such as India, have also been publishing data in the new and the old formats. More countries will begin reporting balance of payments data in the BPM6 format. For now, reported data on personal transfers seem to be the same as for worker remittances for most countries. However, this is expected to change in the future.

BOX 7.2 Examples of What Is, and What Is Not, Classified as Compensation of Employees

A person may move from one economy to another for the purpose of short-term employment (less than one year). Short-term workers and migrants supporting relatives in their country of origin are a major source of cross-border remittance flows.

Compensation of employees. The gross income of border, seasonal, and other short-term workers, who are not residents in the economy where they work, is recorded as "compensation of employees." Nonresident employers, including embassies, other diplomatic missions, and international organizations, may have a substantial impact on remittance data. When resident workers work for nonresident employers, the workers' wages and other benefits are also recorded as "compensation of employees."

Not compensation of employees. The earnings of nonresident workers who sell services to another economy but who are not employees of a nonresident company are not included in compensation of employees.

For most countries, the historical data are not impacted by this change. However, there are some major exceptions. In Brazil, for example, the use of BPM6 resulted in a downward revision of remittance inflows, from \$4.5 billion to \$2.6 billion in 2012. The net effect of the move from BPM5 to BPM6 was a reduction of \$2.2 billion in remittance flows to developing countries in 2012, of a total estimated at \$400.4 billion.

Although the residence guideline in the IMF manual is clear, the rule is often not followed for various reasons. Many countries compile data based on the citizenship of the migrant worker rather than on their residency status. Further, data are shown entirely as either compensation of employees or personal transfers, although they should be split between the two categories if the guidelines were correctly followed.⁶³ The distinction between these two categories appears to be entirely arbitrary, depending on country preference, convenience, and tax laws or data availability.⁶⁴

Some countries do not report data on remittances in the IMF Balance of Payments statistics. Several developing countries (for example, Cuba, Turkmenistan, Uzbekistan,

⁶³ For example, India shows very little compensation of employees, but large personal transfers, although it is well known that India supplies a large number of temporary information technology workers to the United States and European countries.

⁶⁴ Because of the difficulty in classification, countries have often classified personal transfers as other current transfers or transfers from other sectors. In some countries, notably China, remittances may have been misclassified as foreign direct investment. In the case of India and many other countries, remittances may have been classified as nonresident deposits, especially those in local currency terms.

and Zimbabwe) do not report remittance inflow data to the IMF, although it is known that emigration from those countries has taken place. Some high-income countries (notably Singapore and the United Arab Emirates) do not report data on remittance outflows, although they are important destinations for migrants.

A global survey of central banks conducted in 2010 revealed significant heterogeneity in the quality of remittance data compilation across countries (Irving, Mohapatra, and Ratha 2010). Some central banks use remittance data reported by commercial banks, but do not adequately capture flows through money transfer operators, post offices, and emerging channels, such as mobile money transfers. Even when data are available and properly classified, they are sometimes out of date. The methodologies used by countries for remittance data compilation are not always publicly available. It is hoped that increased awareness about the importance of remittances and the shortcomings in the data on remittances and migrant workers will result in efforts to improve data collection.

Quality of Remittance Data

Low-income countries face issues of data deficiencies and data omissions. Data inaccuracy stems from problems associated with knowing the universe of remitters and the intermediaries facilitating the process, enforcing data collection, and applying the appropriate methodologies to capture the data.

Issues to Consider When Dealing with Remittance Data

- BPM version. To the extent possible, it will be important to understand the
 methods for compiling remittances and the version of the Balance of Payments
 Manual the country uses to report data on remittances to the IMF. Countries
 do not apply the manual's concepts uniformly. Some countries are still using
 the concepts and definitions in the guidelines presented in the fourth edition
 of the Balance of Payments Manual (BPM4).
- Data compilation. Data on remittances are far from perfect. Concepts, classifications, and methodologies are not applied uniformly across all countries. Data sourcing and compilation are better in some countries than others. A global survey of central banks reveals significant heterogeneity in the quality of remittance data compilation across countries (Irving, Mohapatra, and Ratha 2010). Some central banks use remittance data reported by commercial banks, but do not adequately capture flows through money transfer operators, post offices, and mobile money transfers. In certain countries, the sources for total remittances are different from those for data on workers' remittances, compensation of employees, and migrants' transfers. As a result, the total remittances figure does not match the sum of the components. In other cases, a country has different numbers for remittances depending if it is the central bank or the minister of finance that reports the number. Better methodologies for compiling remittance data will have an impact on debt burden thresholds.

Some countries do not report data on remittances in the IMF Balance of Payments statistics. For example, Malawi's data on remittances are nonexistent, despite anecdotal evidence that there are high remittances. As a first step, the money transfer services should be required to report monthly data to the Reserve Bank of Malawi.

Undercounting of Remittances

Official data on remittances are believed to be underestimated, perhaps severely, but there is little agreement as to the magnitude of underestimation. Undercounting arises from two sources. First, most remittance source countries do not require reporting of "small" transactions. Remittances through post offices, exchange bureaus, and other money transfer agent companies are often not reflected in the official statistics (World Bank 2006).⁶⁵

Second, official data do not capture remittance flows through informal channels. Remittances transferred through agents such as informal operators or hand carried by travelers may be nearly as large as remittances through official channels. Many household surveys (Burkina Faso, Bangladesh, Nigeria, Kenya, Pakistan, Moldova, Senegal, and Uganda) show widespread use of informal channels of remittances. The fact that in several Asian countries (China, Pakistan, and India) recorded remittances quadrupled, tripled, or doubled between 2001 and 2003 may be in part due to a shift in flows from informal to formal channels in response to tightened regulatory scrutiny since September 11, 2001 (World Bank 2006). In the Comoros, informal transfers account for approximately 80 percent of remittances (da Cruz, Fegler, Schwartzman 2004). One explanation for the generalized use of informal channels is the weakness of the banking sector in the Comoros.

Perhaps the most difficult aspect of tracking remittance data is estimating informal flows. One way to estimate the true size of remittances is to undertake surveys of remittance senders and recipients. Without new, adequately representative surveys of recipients and senders, evidence from existing household surveys will only be indicative rather than comprehensive.

Caveats on the Reporting of the Data According to the New Definition of BPM6

Most countries converted their data to the BPM6 basis by 2014. To present data
on a consistent BPM6 presentational basis, the IMF has been working closely
with countries. However, each country used a different approach that could
have an impact on the data reported on remittances.

⁶⁵ The Bank of Ghana is one of the few banks that collect statistics on remittances and require information from registered banks and transfer agencies.

⁶⁶ See the IMF Balance of Payment Manual for a definition (IMF 1993).

⁶⁷ See Plaza, Sonia, Mario Navarrete, and Dilip Ratha. 2011. "Migration and Remittances Household Surveys in Sub-Saharan Africa—Methodological Aspects and Main Findings."

⁶⁸ The Financial Action Task Force prepared recommendations on AML-CFT after September 11. The implementation of the recommendations can have an impact on the transfer of remittances via informal channels.

- 2. In BPM5, workers' remittances were recorded in their own category, which was a subcomponent of "current transfers." Under BPM6, workers' remittances are reported under a new category called "personal transfers." Personal transfers is a subcomponent of "secondary income." In BPM6, workers' remittances is a supplementary item.
- 3. However, under BPM6, countries report the following categories: personal remittances, personal transfers, and capital transfers. Personal remittances, as defined in BPM6, represent the sum of net compensation of employees (workers with work contracts of less than one year, less taxes, social contributions, and transportation and travel expenditures in their host countries), personal transfers (that is, all current transfers in cash or in kind by migrant workers with work contracts of one year or more as well as other household-to-household transfers between migrants abroad and their families back home), and capital transfers between households (that is, transfers of fixed assets, financial assets, and liabilities that arise from the migration of individuals from one economy to another). Personal remittances, being broader in scope, would measure the total amount of remittance flows into the country, including cash and noncash items that flow through formal (via electronic wire) and informal channels (such as money or goods carried across borders).

Reducing the Costs of Remittances

Remittance costs have been declining over time, but as of the last quarter of 2016, remained high at 7.40 percent of the amount transferred for all developing countries, and at 9.48 percent for Sub-Saharan Africa. The 2030 Sustainable Development Goals include a target for reducing remittance costs to 3 percent by 2030. Reducing remittance costs from the current average of 8 percent to, say, 3 percent would translate into savings of more than \$20 billion annually for migrants and their relatives

An important barrier to lowering remittance fees arises from the costs associated with implementing the AML/CFT requirements. Further development at the national level of a risk-based approach to AML/CFT regulation could help reduce these costs. Facilitating the use of more efficient technologies and fostering competition in the remittance market, while still complying with AML/CFT requirements, could reduce overall compliance costs. Presently, however, "de-risking" by international banks has become a major threat to remittance services to fragile countries, such as Somalia.

The primary source for data on the cost of sending and receiving small amounts of money from one country to another is the World Bank Group's RPW database, which covers 365 "country corridors." To date, these corridors include 48 major remittance sending countries and 105 receiving countries.

Prices for remittances are frequently made up of a fee charged for sending a certain amount; a margin, taken on the exchange rate when remittances are paid and received in different currencies; and, at times, a fee charged to the recipient of the funds. These fee components may also vary according to how the receiver is paid (cash or by crediting an account), the speed of the transfer, and the ability of the sender to provide information about the recipient (such as the bank account number). The RPW collects information on all these elements directly from remittance service providers, and aggregates them into corridor averages to provide an indication of the cost of making remittances (among other indicators compiled and published by RPW). A key challenge is that the volume of remittances sent at each price is not known, and some providers charge a fixed fee that is high when compared with a small transaction, but could be low if the average transaction size using these providers is large.

Data Gaps and Challenges

There are many challenges in compiling remittance-related data and making it more usable to underpin analysis. The challenges include the following:

- Implementing BPM6 and building the needed capacity in central banks in many poorer countries
- Harmonizing data on inflows and outflows of remittances (at present, global summed inflows far exceed globally summed outflows)
- Strengthening the methodology for estimating bilateral remittance flows, including implementing more in-depth studies in countries with good capacity on the sources of inflows
- Analyzing the scale of remittances flowing through unrecorded channels
- Estimating the volume of remittances sent at each price (or market share of various providers), to get a better sense of how well simple averages indicate actual amounts spent by migrants in making remittances
- Disaggregating data by gender, to help inform policy issues related to gender
- Building consistent databases of household survey data to document more explicitly the impact of remittances on development
- Generating micro data on remittance-sending behaviors, informing policy on how to strengthen these flows.

Good Practice

Aggregate Remittance Flows

In addition to the BPM6, the key resource on compiling remittances remains International Transactions in Remittances: Guide for Compilers and Users (2009). The

guide was prepared by the Luxembourg Group on Remittances, involving members from the International Monetary Fund, the Organisation for Economic Co-operation and Development, the Statistical Office of the European Communities, and the World Bank, as well as representatives from national statistical offices and central banks from around the world. The guide details good practice in compiling data related to remittances in the balance of payments, provides clarifications of concepts, and notes data sources and methods for estimation. Various capacity-building initiatives are being implemented with the support of international organizations.

Cost of Sending Remittances

Transparency and data are essential to lowering the cost of making remittances. In addition to the World Bank's RPW, several countries have introduced national databases on the cost of sending remittances. ⁶⁹ Such databases provide updated and more granular information to migrants, and represent one of the most efficient means to improve transparency in the market. Many of these national and regional databases have adopted the World Bank Group's methodological standards and provide information that is consistent and easily understandable by users.

Presently, however, "de-risking" by international banks has become a major threat to remittance services to fragile countries, such as Somalia. AML-CTF regulations could be reviewed. The Know Your Customer (KYC) process should be "step-based" and "risk-based." The level of KYC documentation could be stepped up in a phased manner, depending on the size of payments and existing information on the source of payments.

Developing regulatory frameworks that remove obstacles to nonbank remittance service providers accessing payment system infrastructure, and facilitate interoperability of mobile companies when offering mobile remittances could reduce remittance costs. Promoting competition and supporting the entrance of new players in the remittance markets reduce costs, as has happened in several markets where the elimination of exclusivity agreements has decreased the costs of remittance transfers

Impact of Remittances at the Household Level

There are several examples of good practice in implementing surveys for better understanding the impacts of migration and remittances at the household level. For example, in the Indian state of Kerala, migration and remittance surveys have been undertaken every year since 1998, and include data on household expenditures by various categories and by migrant and non-migrant households. Unlike the national-level surveys, the Kerala effort asked detailed questions on migrant destinations (countries, states, and districts), education levels, employment status

 $^{^{69}}$ See a nonexhaustive list at https://remittanceprices.worldbank.org/en/national-and-regional-databases-certified-by-the-world-bank.

and activity, and access to water supply and sanitation. These data enable analyses of migration and remittances, which help to underpin policies that maximize positive development impacts. Other examples of strong data-gathering efforts at the national level include Mexico and the Philippines. Household surveys undertaken in many countries around the world indicate that a substantial share of income comes from remittances, helping to finance health and education services, as well as other basic needs. As part of the Africa Migration Project, six Migration and Remittances Household Surveys were conducted in Burkina Faso, Kenya, Nigeria, Senegal, South Africa, and Uganda (Plaza, Navarrete and Ratha, 2011). Data from these household surveys reveal that households receiving international remittances from OECD countries have been making productive investments in land, housing, businesses, farm improvements, agricultural equipment, and so on (36 percent in Burkina Faso, 55 percent in Kenya, 57 percent in Nigeria, 15 percent in Senegal, and 20 percent in Uganda. Households receiving transfers from other African countries are also investing a significant share in business activities, housing, and other investments in Kenya (47 percent), Nigeria (40 percent), Uganda (19.3 percent), and Burkina Faso (19.0 percent). Many studies document that the likelihood of attaining the Millennium Development Goals is substantially enhanced by remittances. These data provide many insights on the impact of remittances on development, but more effort is needed to compile these findings systematically, and make the data available more widely. Consistency of the survey instrument will also be essential in this regard.

Key Messages and Recommendations to Address Gaps

Aggregate Remittance Flows Full implementation of BPM6 by all countries is the foundation of the data on remittances. The guidelines on existing or new remittance channels, relations between settlements and information flows, and possible data sources for the compilation of remittances data bring more clarity and enhance understanding. BPM6 also urges country-level authorities to estimate and publish the sources of remittance receipts. Although such data are published by a growing number of countries, they are in the minority, and systematic estimates through a bilateral remittance matrix are estimated at present mainly by the World Bank Group, using an econometric model.⁷⁰

Efforts to improve remittance data would be helped by greater coordination, at the regional level and bilaterally between countries. For example, a regional coordination mechanism could be established to encourage engagement and sharing of information on various regional efforts to improve the measurement of remittances.⁷¹ This would help promote best international practices from the

⁷⁰ World Bank 2007.

⁷¹ The Center for Latin American Monetary Studies.

regions, and help countries to improve and/or implement better procedures for statistical measurement of remittances

Greater coordination is also needed among bilateral partner countries sharing data, metadata, household survey results, and information on the geographical distribution of inflows and outflows between the bilateral compiler's countries. Analysis of asymmetries could be another useful, complementary tool to enhance data collection systems and quality.

Cost of Sending Remittances

Authorities should strengthen efforts to monitor the cost of receiving remittances, requesting appropriate transparency from remittance service providers and establishing effective tools to monitor the market. The creation of a consumer remittance price database is an effective means to provide consumers with comparative information on prices and other service features of specific remittance providers. If developed and presented appropriately, with detailed and comparable information on the cost of remitting money by various service providers, the database can enable remitters to compare how much their beneficiaries will receive, while enhancing transparency in the remittance market.

Impact of Remittances at the Household Level

Getting the most from migration and remittances will require better data on household-level impacts. Expanded surveys using consistent instruments will be essential. Where they have been implemented effectively and consistently, surveys have generated extensive data and strong evidence for generally positive impacts of migration on various indicators of the well-being of migrant-sending households. These data have then been used by policy makers to design policy interventions, like boosting pre-departure training and the establishment of bank accounts to enable lower cost sending of remittances. Implementing surveys among migrants would also help expand the evidence base for improved policy. Finally, household surveys also play an important role in estimating personal transfers, a core element of remittance data

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Chapter 8

Labor Markets

International Labour Organization⁷²

Key Policy Issues

Labor migration impacts the labor supply of the country of origin and the country of destination. Various individual, household, and structural factors influence the decision to migrate (see chapter 4). The ability to measure the magnitude and types of international migration, as well as the number and characteristics of those who migrate, determines how well the impact on origin and destination countries can be understood. Further, labor market impacts involve not only the entry or departure of workers, but the context in which they work, including the market demands, wages, skill-matching, working conditions, and terms of employment.

Three key policy questions about migration related to the labor market and development are

- 1. What is the impact of labor migration on origin countries?
- 2. What is the impact of labor migration on destination countries?
- 3. What are the impacts of migration on labor markets and the economic effects of labor migration on development in origin and destination countries?

The ability to answer these policy questions convincingly depends greatly on the availability and quality of key statistics on migrant workers and labor migration.

Workers' entry and exit into and out of the labor market affect local, national, and regional development. In regional and global labor market systems, a country can experience an influx of immigrant, emigrant, and return migrant workers. The magnitude and composition of entering and departing workers has impacts not only the labor market (disproportionately in some sectors compared with others), but also on the country's development prospects. Key policy and data collection

This chapter was prepared by Mustafa Hakki Ozel, Natalia Popova, Jaewon Lee and Ryszard Cholewinski, International Labour Organization. Box 8.1 was provided by Elisenda Estruch Puertas and Cristina Rapone of the United Nations Food and Agriculture Organization.

issues relating to the impacts on the rural labor market in countries of origin are discussed in Box 8.1. The extent of the impact and the appropriate policy response require data.

BOX 8.1 Rural Labor Markets: Key Policy and Data Collection Issues

Migration has significant impacts on the rural labor market in countries of origin. To Migration can reduce pressures on local labor markets, land, and natural resources, translating not only into more employment opportunities and higher wages for those who remain, but also into matching labor demands during the peaks in the agricultural season. Remittances invested in rural areas can generate positive impacts on agricultural production, by enabling farmers to buy inputs and improved seeds, and improve the quality of cultivated land, and by stimulating farm and off-farm businesses. The increased financial capacity and entrepreneurial inclination of many migrants may gradually change the nature of peasant agriculture, moving from subsistence to more commercial farming. Migrant households are more likely to use new farming technologies and improve agricultural productivity, and to undertake riskier but higher-return agricultural activities.

However, if not adequately managed, migration might pose serious challenges to agriculture and rural areas. In countries of origin, migration can hinder agricultural production and overall domestic economic development due to losses in human capital and agricultural labor, especially when the youngest and most productive workers migrate. The migration of young men may cause the aging and feminization of rural populations, with the risk of additional work burdens for those left behind, especially women and children.

To inform policy making and design appropriate and evidence-based policy responses, the following questions need to be addressed:

- What are the drivers of labor migration from rural areas? What are the main migratory patterns for workers (disaggregated by sex/age) moving out of rural areas?
- What are the impacts of migration and remittances on rural labor markets?
 What are the impacts on local wages, skills, labor allocation, status of employment, and working conditions for those who live in rural areas?
- What are the positive impacts and possible downsides for agriculture and rural households (for example, changes in labor allocation, increased work burdens for women, child labor, working conditions, and so forth), and how can they be mitigated?

⁷³ http://www.fao.org/3/a-i4983e.pdf.

- What policies can be pursued to reap the benefits of migration for rural areas, create new employment and entrepreneurship opportunities, and improve the quality of jobs?
- What are the impacts on rural labor markets of the reintegration of returnees and the engagement of diaspora groups?

Existing household surveys do not usually or consistently include questions related to the impacts of migration in rural areas, and migration and labor force surveys may not adequately cover rural areas and agriculture-based livelihoods. Adding specific questions or modules to current surveys, but also exploring alternative data sources, could help in collecting the required breadth of information and closing evidence gaps. Although the global debate concentrates on international migratory flows, the large majority of migrants, about 762 million, moves internally within countries. Attention should therefore also be given to internal migration (rural-rural and rural-urban), and to circular and seasonal migration schemes that are typically linked to agricultural activities and often overlooked in assessments and diagnostics. The data collected at different points in time may also enable the generation of evidence about migration trajectories, which include internal moves followed by international migration. It is also crucial to have sample frames that enable disaggregation by gender and age, and allow for capturing the drivers of migration (for example, economic activity, status of employment, working conditions, access to social protection, and so forth) and its patterns. Indeed, different drivers and types of migration (temporary, circular, or seasonal migration versus long-term migration; internal/regional versus international migration) may have different impacts on rural areas of origin.

Countries should also be supported in setting up labor market information systems that can effectively collect, process, and disseminate data on rural labor markets. These systems should cover the quantitative and qualitative aspects of employment, as defined by the ILO Decent Work framework. Labor market needs assessments should cover more adequately rural areas and their specificities, monitoring changes in labor supply and demand and needed skills and jobs matching. This will enable countries to design policies and mechanisms for better management of labor mobility, including by improving skills development systems in rural areas, as well as replacing and/or reintegrating workers, thus addressing the possible "brain-drain" and "brain-waste" effects.

Current household-based surveys do not usually or consistently include questions related to skill or occupational qualification, surplus, or obsolescence. Alternative measurement methods, including direct methods, like skills surveys, as well as indirect estimation and projection methods, could be conducted to assess the size, characteristics, and (future) impacts of skill mismatch on the labor market. Indirect methods include (a) using information gained from other survey questions

to approximate information not directly collected (for example, using educational attainment or occupation as a proxy skill level), and (b) comparing available data from multiple sources that do not alone collect the breadth of information needed (for example, comparing and combining findings from census, survey, and administrative data sources).

The International Labour Organization's (ILO's) Labour Migration Module can be used to address the lack of data on skills mismatch and labor underutilization—the "mismatches between labor supply and demand, which translate into an unmet need for employment among the population" (Para 40, Resolution I., 19th International Conference of Labour Statisticians, 2013). The module serves as a source wherein answers to current data and policy needs can be made available within the same data set (CEDEFOP 2010, 93). By using existing data collection instruments and infrastructure, the module employs a cost-effective implementation strategy and minimizes any additional burden on national statistical offices.

Data Needed for Analysis

Economic policies and programs targeted at matching migrant skills to labor market demands benefit from quality data and statistics on the labor market and migrant workers. Furthermore, a mismatch between an economy's needed skills and the qualifications of its available labor force has implications for local, national, and regional development. Therefore, common terms and definitions and the analysis of quality data are needed to assess the changing demand and availability of qualified migrant workers, and to understand the needs of a changing labor market.

Moreover, quality data are needed to assess how well the skills and qualifications of migrant workers match the duties and responsibilities of their current work.

Although data collection capabilities vary significantly at times across ministries and countries, several key statistics should be considered at the country level as being essential to improve the understanding of the impacts of migration on labor markets and development.

Linked to the three key policy issues, data collection and analysis prioritization should answer at least four basic questions:

- 1. What type of information (that is, data) is needed to understand the size and composition of labor migration in countries of origin, transit, and destination?
- 2. What data collection methods (surveys or administrative records) and methodologies (including terms and definitions) are needed to meet common national, regional, and international standards and definitions?

- 3. How (and how well) does the current labor market meet the economic needs of the country? What policies and measures exist to (re)place and (re)integrate workers into the labor force?
- 4. What are the legal frameworks, demographic impacts, and political and historical contexts within which the labor market has evolved?

Moreover, the accurate measurement of international migration flows depends not only on counts at border crossings and within the country via household-based surveys, but also on the accurate measurement of internal (domestic) migration—population movements within the country. As more people migrate through countries that are neither their country of origin nor their intended destination, there is a growing need to collect data to study the phenomenon of transition and to be in a position to develop evidence-based policies. Collecting reliable information on persons in transit can be problematic for various reasons, including the duration of time in transit (at what point is a person no longer in transit?), and consistent recording of arrivals and departures across origin, destination, and transit countries.⁷⁴

Several key statistics provide information that can begin to answer these four questions. The measurement of migration flows and types provides the first indication of potential impact: how many workers are entering, leaving, or returning to the country and the labor market?

Building on the socioeconomic profile of migrant workers (chapter 4), the following information links workers, including migrant workers, to the labor market and development:

- Number and characteristics of:
 - Immigrants (residing in the country for one year or more⁷⁵)
 - Emigrants (left the country for one year or more)
 - Returning and transit migrants
- Number and characteristics of:
 - Migrant workers in the labor force of destination countries (percentage of all workers)
 - Migrant workers leaving the labor market (by reason for departure, such as emigration, retirement, or death)
 - Work status of returned and transit migrants
- Share of migrant workers by economic activity⁷⁶

⁷⁴ In table 1 of their report on international migration statistics, the United Nations (1998) provides a recommended taxonomy on migration flows of citizens and foreigners, including those in transit.

⁷⁵ The United Nations (1998) recommends the use of "one year or more" regarding international migration statistics on time in and away from the country of destination and origin, respectively.

⁷⁶ The United Nations (2008) provides the international reference classification of all productive activities through its report, International Standard Industrial Classification of All Economic Activities (ISIC), Rev4 (ST/ESA/STAT/SER.M/4/Rev.4) (p. 307), New York.

- Share of migrant workers in the informal sector and informal employment⁷⁷
- Type and duration of available employment contracts by migrant/non-migrant workers
- Labor market structure (that is, sector and industry distributions)
- Job creation and termination (including job displacement) mechanisms
- Training and skill development programs
- Educational attainment
- Migrant contribution to macroeconomic dynamics (for example, gross domestic product and foreign trade)
- Migrant contribution to the national tax system
- Percentage of migrants covered by the social security system.

Combined with the basic statistics on migration for work outlined in chapter 4, and adhering to the quality statistical standards discussed in the next section, these key statistics provide a baseline for understanding the impacts on employment and labor markets in source and destination countries, poverty, development, and the protection of workers, including migrant workers. Moreover, these statistics are intended to provide policy makers and practitioners with the tools to develop evidence-based employment, labor migration, and development policies and programs.

Ideally, these data should be collected in and available from both origin and destination countries. In origin and destination countries, longer-term development may also be influenced by temporary labor migration, for example through migrant workers returning to their country of origin after having acquired important skills in their country of destination and then migrating again.

The total medium—and longer-term fiscal impacts in a migrant's country of destination will depend on his or her contribution to that country's sustainable, inclusive, and equitable growth; their employment history; and whether they are entitled to social security benefits in the country of destination when not employed.⁷⁸

Existing Standards and Sources for Data Collection

The first step in exploring the collection of new data is to establish what relevant data are already being collected, by whom, for what purpose, and with what degree of quality. Further, we should ask whether the data collection methods and the data themselves adhere to existing statistical standards.

⁷⁷ For definitions of informal sector and informal employment, see ILO (2004): http://natlex.ilo.ch/public/english/bureau/stat/download/papers/wp53.pdf.

⁷⁸ See Brochmann et al. (2011) and OECD (2013).

Significant national, regional, and international efforts provide guidance for supporting and building data collection infrastructures (for example, national statistical offices) or instruments (for example, household-based surveys) that adhere to agreed-upon standards and definitions.

The ILO supports the development and improvement of data collection instruments, such as household-based labor force surveys, according to international standards and common methodologies, and encourages the adoption of such standards.

Further, developed by the ILO, the International Standard Classification of Occupations (ISCO) serves as an international reference for the design and collection of comparable statistics related to occupation. Although it is related to the International Standard Industrial Classification—the United Nations' industrial standard classification system—ISCO serves to "organize jobs into a clearly defined set of groups according to the tasks and duties undertaken," and measures different aspects of the economy, including the recruitment and admission of migrant workers. Through grouping jobs based on the tasks and duties undertaken, ISCO is a useful tool for comparing across statistical and administrative data sources and as a model for the development or standardization of national occupational classification systems. Further, ISCO is not only useful in statistical applications such as defining or grouping occupations or jobs for analysis and reporting—but also in a variety of client oriented applications, including in assisting in pairing job seekers with job vacancies, managing the short—or long-term international migration of workers, and developing vocational training programs and guidance (ILO 2008; UN 2008).

This chapter highlights data sources and measurement methods on the impact of migration on the labor market, as well as on the overall economic impacts of migration in origin and destination countries. The methods include (a) assessing the effectiveness of job supply and demand (labor market) matching, (b) measuring skill matching (a person's skills suitability for the job they hold or hope to hold), and (c) recognizing informal and non-formal learning.

As the ILO (2013) and the World Economic Forum (2014, 28) note, a fundamental policy issue for labor market matching involves migrant skills, their composition, and matching them to available and future jobs. "Knowledge of the skills composition of migration flows of both potential outbound and returning migrants is extremely important for the design of legal labour migration schemes." 79

Other possible methods and sources include national-level quantitative, model-based projections; sector—and occupation-based studies; and employer and

⁷⁹ See: Research and Analysis of Vacancies and Skills Needs in the European Union, in the Republic of Moldova and Ukraine, ILO (2013) and Matching Skills and Labour Market Needs Building Social Partnerships for Better Skills and Better Jobs (p. 28). Geneva: World Economic Forum (2014).

job vacancy surveys, which can "provide insights into how labour markets develop in response to various external influences."⁸⁰

In addition, an important issue in regulating labor migration is the systematic recognition of qualifications, including informal and non-formal learning.⁸¹ Migrants develop skills, knowledge, and competencies through work in countries of origin and destination, without necessarily having a certification. Recognizing such forms of learning is important to understanding the impact of migration on the labor market, including the labor market integration of return migrants. The European Centre for the Development of Vocational Training provides European guidelines for validating non-formal and informal learning (CEDEFOP 2009, 96).

Chapter 4 describes additional statistical and administrative sources of data on labor migration, including population censuses, household surveys, establishment censuses and surveys, border surveys, and population registers. To understand the impact of migration on origin and destination countries, population censuses should ask for the date of movement to/from the country. To understand the size and characteristics of these movements, multiple years of census data should be analyzed, or census data should be compared with household-based surveys or administrative sources.

Data Gaps and Challenges

Data gaps and challenges, including the lack of comparability of concept definitions and methods, may limit the analysis and understanding of the causes and consequences of migration.

According to the ILO, the lack of sound labor market needs assessments prevents policy makers from ensuring appropriate skills and jobs matching for migrant workers, which results in many migrant workers being employed in lower-level jobs. This situation can lead to de-skilling and "brain waste." Needs assessments should help to explain the unique industrial, occupational, and geographic factors that generate jobs that can be filled by national workers or migrants (ILO Labour Migration and Development: Setting a Course for the Future 2013).

Further, although there are many methods for identifying and analyzing important labor market and economic impact issues, the use of such methods is limited by the

 $^{^{80}}$ Research and Analysis of Vacancies and Skills Needs in the European Union, in the Republic of Moldova and Ukraine, Geneva: ILO, 2013)

Less understood than learning from formal education and training, informal and non-formal learning are gained outside the formal learning system. Unlike formal learning, which is "always organized and structured," informal learning is "never organized, has no set [learning] objectives" and can be called "learning by experience"—where the act of existing exposes an individual to learning. Without a universally-recognized definition, non-formal learning can be described as an "intermediate concept" between formal and informal learning with some elements of both formal and informal learning (OECD.org, 2014).

BOX 8.2 Good Practice Example: Commitment to International Standards and Common Definitions

On October 11, 2013, the International Conference of Labour Statisticians adopted Resolution 1: Resolution concerning statistics of work, employment, and labour underutilization, to set standards for work statistics to guide countries in updating and integrating their existing statistical programs in this field. This resolution defines the concept of work and provides guidelines for countries on issues such as how to classify populations according to labor force status, and how to distinguish among distinct forms of work.

Through promoting common concepts and definitions, the resolution facilitates comparisons of labor force statistics across data sources, countries, and regions.

In terms of improving the current understanding of the impact of migration on the labor market and development, the resolution is intended to help countries achieve several objectives, including the following:

- a. Monitoring labor markets for the design, implementation, and evaluation
 of economic and social policies and programs related to employment
 creation; income generation; skills development, including vocational
 education and training; and related decent work policies
- b. Providing comprehensive measurement of participation in all forms of work and the contribution of all forms of work to economic development, household livelihoods, and the well-being of individuals and society
- c. Assessing participation in different forms of work among population groups, including migrants, and studying the relationships between different forms of work and their economic and social outcomes.

Source: ICLS, Resolution I: Resolution Concerning Statistics of Work, Employment and Labour Underutilization (2013).

lack of quality and timely data. Policy-relevant data analyses are further complicated by the lack of consistent definitions and uses of terms like "employment" and "work" (although some guidance does exist, such as ICLS Resolution 1; see box 8.2).

Finally, little is known about irregular migrant workers, who are difficult to reach by statistical and administrative data collections. Their absence from regular data collection translates to a gap in understanding how such a population impacts the structure, performance, and conditions of the labor market, and may lead to the development of policy and programmatic responses that are unable to address actual labor market impacts.

Key Messages and Recommendations

Effective labor migration policies are needed to respond to labor market needs in origin and destination countries. Assessing the impact of migration on labor markets and development depends on quality empirical evidence. An ideal policy approach on the role and labor force integration of migrants should place high value on evidence-based decision making and public support for comprehensive, quality statistics, such as the regular collection of relevant data from household-based surveys. Efforts to increase the quality and comparability of existing statistics on migrant workers can be aided through direct consultation with ministries, national government counterparts, international organizations, and civil society, as well as making commitments to national, regional, and international standards and methods of data collection and reporting.

Understanding the role of migration in the labor market is also essential to reap the developmental benefits of migration. Good data are essential for policy makers and practitioners to develop informed, evidence-based responses to the current and future challenges posed by shifting labor market demands and the movement of people in search of decent work.

To this end, policy makers and practitioners should consider the following priority areas for action:

- 1. Support continued data collection and research to fill evidence gaps on labor migration and its impacts.
- 2. Build and support the capacities of countries to gather, analyze, and use data for policy formulation and program planning, to understand the changing impact of migration on labor markets.
- 3. Improve coordination between users and producers of labor migration information, involving social partners.
- 4. Support and build efforts that balance labor market efficiency with equity, based on up-to-date, quality data.

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Chapter 9

Trade, Migration, and Development

United Nations Conference on Trade and Development82

Key Policy Issues

There is now wide recognition that migration is a driver of sustainable development, and that migrants are agents of development. The effects of migration may go beyond the impact on migrants' lives, to encompass the economic and social development axes in host and home countries. These effects include the contribution of migration to international trade, which in turn is an important enabler of development.

Importance of Migration to Trade

The existence of an important migrant population in a country is often correlated to an increasing amount of trade between the migrants' host and home countries. This situation is highly related to what is sometimes referred to as "nostalgia trade." Nostalgia trade involves such things as trade in tourism services, when migrants go back home to visit, or trade in home-country goods.

Diaspora tourism may include medical, business-related, heritage, education, and other forms of tourism. Some tourism services may be pursued as part of a public policy to build stronger links of migrants to the home country. Notably, tourism from migrants tends to be more focused on local products and services, such as locally owned accommodations and restaurants. These stronger links to the local economy are also likely to occur in migrant consumption of home-country goods, particularly foodstuffs or other items associated with the culture of origin. These nostalgia goods tend to be more traditional, sometimes artisanal, and often with more local value added than other comparable items.

⁸² This chapter was prepared by Mina Mashayekhi, Bruno Antunes, and Martine Julsaint Kidane of the Trade Negotiations and Commercial Diplomacy Branch of the Division on International Trade in Goods and Services, and Commodities of UNCTAD.

⁸³ Newland, Kathleen, Carylanna Taulor (2010), Heritage Tourism and Nostalgia Trade: A Diaspora Niche in the Development Landscape, Migration Policy Institute.

Migration can also boost trade flows between countries by leveraging diaspora networks that can transmit remittances, skills, technology, know-how, and information on work, business, and education opportunities. The networks may provide business leads, financing, circumvention of trade barriers, and reduction of trade-related transaction costs. This mechanism can be harnessed by diaspora engagement policies. Empirical evidence has shown that permanent and temporary migration promote bilateral trade flows. And although permanent migrants may be more integrated in the host country, it has been demonstrated that temporary migration tends to have a stronger and more significant effect on imports and exports than permanent migration does. A key factor that may explain this finding is that more recent migrants have more up-to-date knowledge of the home country.⁸⁴

Importance of Trade to Migration

Economic integration, and cooperation and trade agreements at the bilateral, regional, and international levels provide a platform through which measures can be put in place to facilitate migration. These agreements can improve the benefits and efficiency of migration. These agreements, such as the General Agreement on Trade in Services (GATS) and some regional and bilateral trade agreements, include the temporary movement of natural persons to supply services as one of the means to trade in services. Mode 4,86 as it is referred to in GATS and other agreements, can therefore be considered a subset of regional and international migration,87 and these agreements as one of the tools to remove barriers to the movement of people. Trade negotiations also address multiple issues that go beyond market access and facilitate mobility, including recognition of qualifications, streamlining of recruitment criteria, and searching for related common international standards.

Multilateral commitments in this regard have generally been qualified as limited, whether in the Uruguay Round, Post-Uruguay Round Mode 4 negotiations, or current Doha round. Resolutions have generally made commitments at the horizontal level (that is, applicable to all the services sectors included in the liberalization commitments) and for categories of persons moving as intra-corporate transferees or business visitors. Even in the liberalization commitments of countries that later acceded to the World Trade Organization (WTO), this trend is maintained. The commercial significance of these commitments is diminished by the conditions and limitations often included by Members in their schedules, and that relate to measures such as economic needs tests, quotas, or pre-employment requirements. It is notable that of the 90 economic integration agreements that were concluded

 $^{\,^{84}}$ Mashayekhi, Mina. (2013), p.13 Chapter: Maximizing the Development Impact of Remittances.

⁸⁵ OECD (2016), Perspectives on Global Development 2017: International Migration in a Shifting World.

⁸⁶ The other modes are Mode 1 (cross-border supply), Mode 2 (consumption abroad), and Mode 3 (commercial establishment).

⁸⁷ Mode 4 does not apply to measures regarding citizenship, residence, or permanent employment.

⁸⁸ Carzaniga, Antonia (2014), Negotiating mode 4 access, presentation made at the Central European Free Trade Agreement–World Bank Dialogue, Brussels, 29 April.

⁸⁹ http://www.wto.org/english/tratop_e/serv_e/mouvement_persons_e/mouvement_persons_e.htm (consulted 27.08.2014).

between 2000 and October 2012, covering services trade, all cover Mode 4 and a few include a separate chapter dealing with the "temporary entry of business persons." Still, compared with current GATS offers, the advances in commitments are not very significant. In some cases, only formal qualifications are considered in assessing services providers, excluding the evaluation of skills and experience. Visa and work permits are often cumbersome, costly, without clear criteria, and biased toward high skill levels. Other barriers revolve around nationality and residence requirements, and the non-portability of social security benefits. Some migrant-reduction policies, including salary thresholds for foreign nationals, also affect Mode 4 service suppliers.

Many negotiators, particularly among developing countries and least developed countries (LDCs) which have long stated a keen interest in more commercially meaningful Mode 4 liberalization, have felt that the offers on the table were far from satisfactory. To address this, countries have put forward proposals (individual country proposals as well as group proposals and a plurilateral proposal of 15 developing to nine developed countries) that sought to improve the number and quality of Mode 4 commitments. The collective request from the LDC members of the WTO for preferential market access for their services and services suppliers also included a strong focus on barriers to Mode 4 (see box 9.1). In these proposals, members have suggested, among other things, that the number of sectors with Mode 4 commitments be increased; mutual recognition agreement be encouraged; commitments relating to individual professionals be extended; the scope of categories covered be extended to include middle—and lower-level professionals and nonprofessional categories; the prevalence of economic needs tests and labor market tests for Mode 4 be reduced; facilitated administrative procedures relating to visas, work, and residence permits be put in place; and social security requirements be implemented in a manner that they do not erode the competitiveness of service suppliers.

Even in broader proposals, the temporary movement of persons has been addressed. In a submission regarding possible elements of a Trade Facilitation in Services Agreement, the facilitation of the movement of natural persons was envisaged by providing and making publicly available explanatory material on all relevant immigration formalities; multiple entry permits; exemption of committed categories of natural persons from payment of additional costs and charges, including social security payments; portability of benefits where social security payments cannot be exempted; and opportunities for developing countries to accede to recognition agreements pertaining to the authorization, licensing, and certification of services suppliers. This development is particularly important, because mutual recognition is mostly between developed countries and can become trade distorting rather than trade creating. Discussions around domestic regulation issues could also lead to lower barriers based on licensing, qualification, and technical standards. A recent initiative on the administration of measures includes relevant proposals

⁹⁰ Carzaniga, Antonia (2014), op. cit.

BOX 9.1 Least-Developed Country Preferences

World Trade Organization (WTO) members recognize that least-developed countries (LDCs) need special treatment and assistance to achieve their development objectives. Multilateral agreements include provisions to increase the trade opportunities of LDCs and allow flexibility in the implementing rules. In the current Doha Round, the Bali outcomes include decisions to implement further duty-free and quota-free market access and preferential rules of origin for LDCs, and a monitoring mechanism for special and differentiated treatment

Members have also agreed on a waiver allowing non-LDCs to deviate from most-favored nation obligations under the General Agreement on Trade in Services, to provide market access preferences to services and services suppliers of LDCs. Although the waiver was adopted in 2011, WTO members had not yet introduced preferences until recently. The Bali decision provided a road map for the operationalization of the waiver, resting largely on the formulation by LDCs of a collective request identifying barriers and requesting their elimination on a preferential basis. This request was submitted in July 2014, and now members in a position to do so are notifying services preferences for LDCs.

Still, the temporary movement of natural persons remains under-addressed in the waiver. Mode 4 for the most part is unbound and subject to limitations, such as commercial presence requirements. Although the notifications contain some interesting examples, such as doubled periods of stay, waived economic needs tests, waived visa fees, and work permits, there are no notable breakthroughs.

on the processing of applications, fees, and examinations that could contribute to such a reduction in the barriers to the movement of natural persons. These proposals include endeavors to permit applicants to submit applications at any time, including in electronic format; accept authenticated supporting documents in place of originals; to provide indicative timeframes for processing and inform applicants of the status of applications and decisions; provide guidance if the application is incomplete and allow for the submission of additional information; and inform applicants of the reasons in case of rejection. The proposals also aim to ensure that authorization fees are reasonable, transparent, and do not restrict the supply of the service, and that examinations should be scheduled at reasonably frequent intervals and provide a reasonable period to enable applicants to request to take the examination.

Trade, Migration, and Remittances

There is a clear case for the benefits that countries would gain from promoting the temporary movement of persons to supply services through commitments in the WTO Doha Round on GATS, Mode 4, including by generating remittance flows. In 2015, there were 244 million international migrants, a significant 3.3 percent of the world population, up from 173 million in 2000.91 In 2015, global remittances of international migrants reached \$582 billion, of which \$432 billion were to developing countries.92 These values are considered an underestimation, since they account only for formal channels.93 In 2013, 71 percent of migrant workers were concentrated in services.94 Remittances grew more between 2010 and 2015 than foreign direct investment (FDI) in developing countries (with a 5.4 percent annual growth rate).95

Migration-facilitating policies, including enabling trade policies, impact the level of remittances and their development potential. A 10 percent rise in remittances led to a 3.1 percent reduction in poverty. Such efforts should encompass the coordination of several policies envisaging market strengthening and financial inclusion. Important policies include competition promotion; cost reduction in the financial transfer process; more accessible and affordable transfer channels, combining for instance banking, telecommunications, postal, and agent networks; and addressing irregular channels. Improving transparency and information on these costs will enable senders to choose the most cost-efficient options. It is also central to attend to recruitment costs through effective governmental regulatory monitoring frameworks.

Moreover, it is highly relevant to maximize the development impact of remittances. Providing options to enable people to use these private resources to leverage development investments, including infrastructure and productive capacity, is central. Financial counseling can be instrumental in this regard. Adequate investment products for remittances may include diaspora bonds, community projects, or investment opportunities related to nostalgia products. Yet, these inflows do not replace the development role of the public provision of social services, industrial development, and investment in export sectors.

⁹¹ United Nations, Department of Economic and Social Affairs (2016). International Migration Report 2015.

⁹² World Bank (2016), Migration and Development Brief 26.

 $^{^{93}}$ UNCTAD (2014), Report of the Expert Meeting on the Impact of Access to Financial Services, including by Highlighting Remittances on Development: Economic Empowerment of Women and Youth.

⁹⁴ ILO (2015), ILO Global estimates on migrant workers.

⁹⁵ UNCTADStat.

⁹⁶ UNCTAD (2011), Impact of remittances on poverty in developing countries (UNCTAD/DITC/TNCD/2010/8)

⁹⁷ UNCTAD (2013), Maximizing the development impact of remittances (UNCTAD/DITC/TNCD/2011/8).

⁹⁸ Nurse, Keith, Diaspora, Migration and Development in the Caribbean, FOCAL Policy Paper.

Trade Considerations for Concerns on Migration

Despite the recognition of migration's positive impact on development, sensitivities remain high vis-à-vis the movement of labor compared with trade and capital flows. The concerns regarding the impact of persons temporarily moving to a destination country are largely similar to those regarding permanent migrants, and revolve around issues pertaining to perceived adverse impacts on the domestic labor market, expected job losses, and lower wages for some locals.

These concerns often do not consider that migration may attend to demographic needs or labor shortages, thus enabling market expansion rather than lowering employment. Moreover, and as detailed in the links between trade and migration, migration will possibly be related to increased trade opportunities. In this case, the gains from trade need to be taken into account when analyzing the eventual negative impacts of migration on host-country wages, to reach meaningful conclusions on the overall effect of openness policies.

There are also some migration-related concerns in countries of origin. In this regard, remittances matter and, in some cases, they may outweigh possible negative impacts on lost tax income in home countries, in particular considering that the factors that drove migration could include scarce employment opportunities. Brain drain needs to be taken into account, although brain circulation also needs to be factored in. Furthermore, where movement involves high-skilled persons, there is an incentive to invest in human capital and education, a key feature for overall social and economic development.

Data Needed to Analyze the Topic

Trade issues are often in the interface of several policy issues, and thus the data required to analyze the aforementioned topics could be very broad. This chapter focuses on data that are directly related to trade.

Regarding the importance of migration to trade, it is relevant to have data on nostalgia trade, including diaspora tourism services and home-country product trade flows. Ideally, these data would be comprehensive and sufficiently disaggregated to facilitate specific policy-oriented actions. It would also be relevant to have information on the countries of destination, and on the policies that are put in place to engage the diaspora and foster their networks.

To analyze the issues mentioned under the importance of trade to migration, it would be necessary to have information on regional integration initiatives, cooperation schemes, and trade agreement commitments that have the potential to affect mobility. It is relevant to have information on dispositions regarding market access and related conditions and limitations. It is also important to have data

on Mode 4-enabling factors, such as the number of agreements that provide for mutual recognition of qualifications and/or experience, facilitated visa procedures, or streamlining recruitment criteria.

To analyze specific trade through the movement of service suppliers, data are needed to measure the contractual services provided by natural persons (service suppliers) from one country in the territory of another country, whether as employees of a foreign service supplier or as self-employed providers. ⁹⁹ This need implies measuring the number of persons moving (flows) and temporarily present (stocks) abroad in the context of the supply of services.

Existing Sources and Standards for Data Collection

Trade flow data are usually available through several national and international sources, and may derive from transactional information or estimations. The United Nations Conference on Trade and Development (UNCTAD), as the focal point for the integrated treatment of trade and development and interrelated issues in the areas of finance, technology, investment, and sustainable development, compiles, validates, and processes a wide range of trade data collected from national and international sources. Hence, merchandise and services data can be found on UNCTADstat, a free-to-use dissemination platform. ¹⁰⁰ Services trade data can also be found on UN Services Trade, the database from the United Nations Statistical Division; ¹⁰¹ trade and tariff data from the World Integrated Trade Solution, a software from the World Bank in collaboration with UNCTAD and in consultation with other organizations; ¹⁰² and trade value-added data from the Trade in Value Added joint Organisation for Economic Co-operation and Development—WTO initiative ¹⁰³ or from the World Bank's Export Value Added Database. ¹⁰⁴

Policy data can often be found in government information sources, including in legislation and official reports, or in secondary sources, including in academic research and reports from international organizations, such as UNCTAD's Services

⁹⁹ Mode 4 also covers movement of intra-corporate transferees and foreign employees directly recruited by the foreign affiliate, as well as service sellers and persons responsible for setting up commercial presence. However, data relating to these Mode 4 categories are not necessary, as in the case of intra-corporate transferees. The services trade should be captured by data on the commercial presence itself and, in the case of service sellers and persons responsible for setting up commercial presence, they do not directly engage in services trade per se.

¹⁰⁰ For more information, see http://unctadstat.unctad.org.

¹⁰¹ For more information, see https://unstats.un.org/unsd/servicetrade/default.aspx.

¹⁰² For more information, see http://wits.worldbank.org/.

 $^{^{103}}$ For more information, see http://www.oecd.org/sti/ind/measuringtradeinvalue-addedanoecd-wto-jointinitiative.htm.

¹⁰⁴ For more information, see http://data.worldbank.org/data-catalog/export-value-added.

BOX 9.2 Services Trade Restrictions

Services trade restrictions can be found, for example, in the Services Trade Restrictions Database from the World Bank, or in the Services Trade Restrictiveness Index from the Organisation for Economic Co-operation and Development. These tools map restrictions by country, sector, type of restriction, and, in the case of the first database, by mode of supply, including Mode 4 on the movement of persons under the General Agreement on Trade in Services (GATS). The tools thereby enable evidence-based policy analysis and action.

For example, according to the World Bank's Services Trade Restrictions Database, where the value "0" for the index would mean no restrictions and the value "100" would mean a completely closed market, professional services trade through the temporary movement of persons is overall more restricted in China and South Africa (both with an index of 75) than in India, Indonesia, and the United States (all with an index of 70). In turn, trade through the movement of persons under GATS is more restricted in these countries than in Kenya (65), the European Union (60), and Brazil (50).

- a. For more information, see http://iresearch.worldbank.org/servicetrade/.
- ${\tt b.} \ \, {\sf For more information, see http://www.oecd.org/tad/services-trade/services-trade-restrictive-ness-index.htm.}$

Policy Reviews. ¹⁰⁵ Intelligence on regional integration initiatives, cooperation schemes, and trade agreement commitments exists in documents and commitment lists from such initiatives, schemes, and agreements, or, alternatively, in secondary sources. The WTO has consolidated and made available information on trade, market access, trade agreements (for example, the Regional Trade Agreements Information System and the Database on Preferential Trade Agreements), and trade policy measures, including tariffs and nontariff measures for merchandise and services. ¹⁰⁶ The International Organization for Standardization is also developing work on international standards on services, including on information technology services management, consulting, tourism, and training, which can provide important information. ¹⁰⁷ Information on services trade restrictions, including on Mode 4 on the movement of persons, is also important for orienting policy action (see box 9.2).

¹⁰⁵ Services Policy Reviews are systematic reviews of the economic, trade policy, regulatory, and institutional frameworks characterizing a country's services sectors, to harness the development benefits of the services sector and international trade in services. Reviews have been conducted for Bangladesh, Kyrgyzstan, Lesotho, Nepal, Nicaragua, Paraguay, Peru, Rwanda, and Uganda. Sectoral analyses include professional services; tourism; construction; and infrastructure services, such as information and technology, transport, energy, and financial services. For more information, see http://unctad.org/en/Pages/DITC/Services-Policy-Review-Series.aspx.

¹⁰⁶ For more information, see http://www.wto.org.

¹⁰⁷ For more information, see http://www.iso.org/iso/home/news_index/iso-in-action/services.htm.

The Interagency Task Force on Statistics of International Trade in Services ¹⁰⁸ has compiled a Manual on Statistics of International Trade in Services (MSITS), which was first published in 2002, then revised in 2010 before being published in 2011. ¹⁰⁹ MSITS 2010 sets out an internationally agreed framework for the expanded compilation, structuring, and reporting of comparable statistics on international trade in services. MSITS 2010 conforms with and explicitly relates to other statistical frameworks, including the System of National Accounts 2008 and the sixth edition of the Balance of Payments and International Investment Position Manual. The manual also develops a new framework for measuring the activities of foreign affiliates (Foreign AffiliaTes Statistics—FATS).

The manual recommends the breakdown of data by partner economy for services transactions between residents and nonresidents, to enable reporting details about partners, first at the level of services trade as a whole and then for each of the main types of services. These main types of services should be the ones in the sixth edition of the Balance of Payments and International Investment Position Manual and, as a longer-term goal, the more detailed and disaggregated Extended Balance of Payments Services Classification (EBOPS). The manual also recommends the collection of FATS basis variables, including sales and/or output, employment, value added, exports and imports of goods and services, and number of enterprises, as well as complete statistics on FDI, including flows, income, and period end positions, as complements to FATS. It is also important that the services transactions between residents and nonresidents and FATS sales or output of services should be allocated over the GATS modes of supply. For the presence of natural persons, the manual recommends collecting statistics on the number of persons under the GATS framework, from the compiling economy present abroad and foreign natural persons present in the compiling economy.¹¹⁰ It would also be important to record the origin/destination of persons, their skills and occupations, and the length of stay of the service supplier.

Data collected according to the International Recommendations for Tourism Statistics 2008 and Tourism Satellite Accounts: Recommended Methodological Framework 2008 are useful for Mode 4, as the number of international visitors can be broken down according to the main purpose of the trip. The typical categories that are used include personal (holidays, leisure and recreation, education and training,

¹⁰⁸ Seven international agencies, namely Eurostat, International Monetary Fund, Organisation for Economic Co-operation and Development, United Nations Conference on Trade and Development, United Nations Statistics Division, World Tourism Organization, and World Trade Organization, have come together to form an Interagency Task Force on Statistics of International Trade in Services. The objectives of the task force are to elaborate the statistical requirements of GATS (http://unstats.un.org/unsd/tradeserv/TFSITS/default.htm, consulted August 22, 2014).

¹⁰⁹ United Nations Department of Economic and Social Affairs, Statistics Division (2010) Manual on Statistics of International Trade in Services 2010, New York, United Nations.

¹¹⁰ United Nations Department of Economic and Social Affairs, Statistics Division, 2010, op. cit.

health and medical care, and so forth) and business and professional purposes. The latter can be seen as a proxy for flows of Mode 4 persons.¹¹¹

Further, the statistical framework for the compilation of migration statistics is the United Nations Recommendations on Statistics of International Migration, Revision 1 (RSIM, Rev. 1). The framework defines non-migrants and international migrants, of which the terms short-term migrants (more than three months and less than 12) and long-term migrants (a year or more) have a clear overlap with Mode 4-type movement. More specifically, it can be considered that migration statistics include statistics on Mode 4 flows and stocks of persons under the non-migrant category corresponding to business travelers.¹¹²

Data Gaps and Challenges

Trade data often lack the availability and level of disaggregation that are necessary to take specific policy-driven actions. Some home-country products that contribute to nostalgia trade, for example, may only be found at the 10-digit-level of disaggregation, which means that the products are not identifiable in many data sources. Diaspora tourism services face some data challenges that are transversal to the whole services sector.

For tourism services and home-country products, it may be challenging to collect data on the clients. However, these data—such as whether the clients are migrants and where in the diaspora they are from—could be useful for taking policy actions on nostalgia trade.

Beyond the data registry and collection challenges associated with their intangibility, services trade data are often not fully available for all countries. Despite important advances, there is still lack of information on partner country data for services trade between developing countries. In some trade flows, mirror data are used, but with the risk of some data inconsistencies. Another challenge with services trade data, including Mode 4 data, is that several institutions (for example, the national statistical office, tax authorities, social security agencies, and so forth) are involved and need to cooperate to provide relevant statistics.

Several countries have started to measure their trade in services according to the GATS modes of supply (that is, seeking to attribute each international service transaction recorded in the balance of payments to a mode of supply). These examples demonstrate that although international transactions can sometimes be allocated to a single mode, a single transaction can also be composed of several modes of supply. For example, a single service contract between an architect and his client

¹¹¹ Joscelyn Magdeleine, Andreas Maurer (2008), Measuring GATS Mode 4 Trade Flows, Staff Working Paper ERSD-2008-05, World Trade Organization Economic Research and Statistics Division.

¹¹² Joscelyn Magdeleine, Andreas Maurer (2008), op. cit.

may cover several modes of supply, including Mode 1 (for the delivery to the client of the design of the construction project through electronic mail) and Mode 4 (if occasional visits to the location of the client are required). This characteristic increases the difficulty of identifying what is directly associated with Mode 4 of particular interest for labor mobility. Finally, data on market access alone would not be sufficient to explain the migration-promoting capacity of trade agreements, but rather data on Mode 4–facilitating measures should also be collected.

Good Practice

Several countries have been moving forward in their efforts to deal with services data and information gaps and challenges. In Colombia, beyond the information available through the balance of payments, the Quarterly Sample of Foreign Trade in Services includes information on the country of origin, country of destination, services classification according to EBOPS, and mode of supply, in line with what is established in MSITS

In Brazil, the new industrial policy recognizes the importance of the services sector for generating horizontal economic competitiveness, and dedicates to it a set of specifically targeted initiatives. The initiatives include the Integrated System of Foreign Trade in Services and Intangibles (SISCOSERV), which is an important tool for services classification, data collection, and policy action. The system ensures adequate classification of services activities based on the United Nations Central Product Classification, and the necessary adaptations to ensure applicability to Brazil's economy. The system covers all services transactions between residents and nonresidents. Data collection encompasses the four modes of trade in services and the following elements: value, start and end dates of services provided, classification code, transaction currency, mode of delivery, and data on the foreign seller or buyer. In turn, SISCOSERV provides information for sectoral diagnosis and several public institutions supporting public policy and commercial intelligence. Thereby, the system ultimately supports companies' trade efforts. Brazil's objectives were to collect data that provide a wealth of information for trade analysis and policy formulation.

Key Messages and Recommendations to Address Gaps

Policies to enhance data availability and quality are crucial for evidence-based policy action and development efforts. Government acknowledgement of this importance is a relevant step for the inclusion of related initiatives in national development strategies.

¹¹³ Joscelyn Magdeleine, Andreas Maurer (2008), op. cit.

The example of SISCOSERV illustrates the relevance of assigning a high priority and political support to data availability and quality, which is necessary for designing development policies. The Brazilian system is fed by mandatory reporting from economic agents for all services transactions between residents and nonresidents. This reporting is facilitated by a strong institutional setting, which derives from a presidential decree. Another enabling factor is related to the country's experience in e-government and e-platforms. The implementation process included training and awareness-raising initiatives focused on the private sector.

Opportunities for South-South cooperation are relevant, because some developing countries could benefit from the experience of countries such as Brazil. International cooperation between national entities dealing with data collection, compilation, and analysis is a useful means to assist developing countries and least-developed countries. Advocacy initiatives toward more and better data are also welcome, and could be an important part of strategies to address data gaps and challenges.

Chapter 10

Intellectual Property and the International Mobility of Skilled Workers

World Intellectual Property Organization¹¹⁴

Introduction

Skilled migration is an important economic phenomenon. People moving to where their skills can be most effectively used promises economic benefits, not only for the migrant workers, but also for the economies that host them. At the same time, for developing economies, skilled migration can pose important development challenges. The exit of skilled workers directly reduces an economy's human capital endowment, with consequences for economic development. Although there is the possibility of return migration or economic contributions from the diaspora, such outcomes are not guaranteed.

The relationship between intellectual property and skilled migration is twofold. On the one hand, intellectual property protection may affect the decisions of scientists and engineers about where to exercise their profession. Or, vice versa, outward migration of skilled workers can impact the effectiveness of the intellectual property system in reaching its goals of promoting innovation and technology transfer. Moreover, national patent laws and enforcement regimes, together with international treaties, affect international trade, foreign direct investment (FDI), and multinationals' location decisions. These factors, in turn, may affect the migration of scientists and engineers.

On the other hand, skilled migration and intellectual property are related on a methodological level, by offering a window into the movements of skilled workers. Recently, the bibliographic information disclosed in patent applications has been exploited as a source of information for studying the international mobility of inventors. Information about inventors, retrieved from patent data, is helping to answer several relevant questions on the economics of migration, such as on the following: (a) the contributions of foreign scientists and engineers—of whom

¹¹⁴ This chapter was prepared by Carsten Fink, WIPO.

inventors are an important subgroup—to the innovation and technological potential of the host countries; (b) whether these high-skilled workers substitute or complement the local labor force; (c) whether specific immigration reforms need to be undertaken to attract and retain the most skilled workers; and (d) whether challenges and opportunities may arise from high-skilled emigration for low—and middle-income countries, in the form of knowledge diffusion back to their homelands and possibilities for innovation and technological progress.

Migrant Inventor Information from Patent Data

Economic research has long used patent data to conduct empirical analyses in several fields and subfields. To a significant extent, these data have been used because of the patent applications data that have become available electronically over the past 30 years.

To obtain a patent right, individuals, firms, or other entities must file an application that discloses the invention to the patent office and eventually to the public. Then a patent office examines the application, evaluating whether the underlying invention is novel, involves an inventive step, and is capable of providing profits (Griliches 1990). The attraction of patent data for economic research lies in such data being available for a wide range of countries and years, and for detailed technology classes (Hall 2007). Among many other things, patent documents contain information on the applicants and inventors, including their complete names and residence at the time of application, to the level of detail of street addresses. The use of such data should be subject to ethical considerations and the usual rigorous statistical standards.

Lately, inventors' information from patent applications has also been used for migration research.¹¹⁵ Inventors are a representative sample of highly skilled workers, and a special category among the latter. Focusing on inventor migration captures one specific class of workers that is bound to be more homogenous than the group of tertiary educated workers as a whole. In addition, inventors arguably have special economic importance, as they create knowledge that is the genesis of technological and industrial transformation.

Approaches to Migration Using Patent Data

Migration information can be extracted from patent data in three ways. First, a basic approach consists of tracking inventors' international mobility by following their patenting histories across different countries (Oettl and Agrawal 2008). This approach holds promise when it is applied to certain countries (for example, the United States), although it is not the most appropriate methodology to depict the whole picture of inventor migration flows across several countries. For example,

¹¹⁵ Examples of this burgeoning literature include Agrawal et al. (2011), Breschi et al. (2014), Foley and Kerr (2013), and Miguélez (2014).

many inventors could be observed migrating from the United States to China or India, when it turned out they were returnee inventors who applied for their first patent while studying or working in the United States, and subsequent patents after having come back to their home country.

A second approach consists of combining inventor-based data with extensive information on the ethnic origin of names and surnames from official registers, that is, "ethnic matching." A pioneering strategy in this direction is provided by Kerr (2007), who combines inventor data (name and surname) from the U.S. Patent and Trademark Office with the Melissa ethnic-name database, a commercial repository of names and surnames of U.S. residents, classified by likely country of origin. Names and surnames from the two sources are matched to assign an "ethnic affiliation" to each inventor, based on linguistic or cultural affinities. After the matching, nine ethnic groups are identified: English (including U.S. natives), European (except the Russian Federation and Spain), Russian (Russian-speaking countries in the former USSR), Hispanic-Filipino (all Spanish-speaking countries), Chinese (including Singaporean), Indian (including Pakistani and Bengali), Japanese, Korean, and Vietnamese.

Using this approach, Kerr (2007) finds that:

- 1. The ethnic inventors' share of all U.S. resident inventors has grown remarkably over time, from around 17 percent in the late 1970s, to 29 percent in the early 2000s.
- 2. The fastest-growing ethnic inventor groups are Chinese and Indian.
- 3. Ethnic inventors appear to cluster disproportionately in metropolitan areas.

More recently, Breschi et al. (2014) build on the same approach by experimenting with the IBM InfoSphere Global Name Recognition (IBM-GNR) system, a commercial product that associates a list of names and surnames to a likely country of origin. Different from Kerr (2007), Breschi et al. (2014) make use of European Patent Office (EPO) data and exploit a different name-and-surname database, containing finer-grained information on countries of origin. Their work broadens the research frontier beyond the United States as receiving country, and looks at a broader set of sending countries, beyond the main providers of talent to the United States, that is, China, India, and other Southeast Asian countries. Some of the results from Breschi et al. (2014) can be summarized as follows:

- Beyond the United States, other Organisation for Economic Co-operation and Development (OECD) countries stand out in attracting foreign inventors, as witnessed by their share of resident foreign inventors during 1995–2005; the countries include Switzerland, the Netherlands, Belgium, Sweden, and the United Kingdom.
- 2. On the other side of the spectrum, the Republic of Korea, Japan, and Italy lag in attracting talent among the countries analyzed.

3. Econometric analysis of citations to patents received reveals that, in general, the contribution of immigrant inventors exceeds that of locals.

The "ethnic matching" approach has produced important insights. However, a "health warning" is necessary for such data. The cultural origin of inventor names may not always indicate recent migratory background. There are significant limitations and implications of categorizing people by name, which may not necessarily indicate recent migratory patterns, but could just be plucking out people with "ethnic" names, even if they are citizens of the relevant country and have parents who are too. For example, the migration history of certain ethnicities spans more than one generation, such as the history of Indian and Chinese immigrants in the United States or Turkish immigrants in Germany. Conversely, this approach may overlook immigrant inventors with names sharing the same cultural origins as the host country, for example, Australian or British immigrants in the United States.

A third approach consists of collecting information on the nationality of inventors. The World Intellectual Property Organization (WIPO) has recently sponsored this endeavor by releasing a data set of inventors listed in Patent Cooperation Treaty (PCT) applications. The data set contains not only the inventors' country of residence, but also their nationality. We turn next to discussing some of the main challenges associated with using patent data for migration research.

Data Gaps and Challenges

All the approaches mentioned using inventors' names for migration analysis share the problem that there might be homonyms among inventors' names that may (or may not) refer to the same inventor. At the same time, two differently spelled inventor names may refer to the same person. Unfortunately, inventor databases do not provide a single identifier for each inventor or anyone else. Therefore, it is necessary to disambiguate the names of the inventors, by assigning a unique identifier to each real inventor and anyone else.

Disambiguation consists of the identification of two or more inventors listed on several patents as the same person, based on their homonymy or quasi-homonymy (identity or similarity of names and surnames), using related information contained in patent documents (postal address, common co-inventors, common citations, technological class, and so forth). While performing this operation, type I errors (false positives) are generated whenever two inventors are presumed to be the same person, when in fact they are not; type II errors (false negatives) are generated whenever two inventors who are indeed the same person are not identified as such.¹¹⁷

¹¹⁶ See http://www.wipo.int/econ_stat/en/economics/studies/ to access all the materials produced by WIPO as part of the Project "IP and brain drain" (accessed October 27, 2014).

¹¹⁷ On name disambiguation, see Raffo and Lhuillery (2009).

When conducting this nontrivial task, there are several heuristics and no ex ante name disambiguation effort can produce an entirely satisfactory result. The collective effort of the scientific community is needed, together with the support of the relevant institutions. Although some attempts in this direction have been made, this journey is far from completed.

Examples of such efforts are those of Lee Fleming and co-authors (Li et al. 2014), who made publicly available several generations of disambiguated inventor data from the U.S. Patent and Trademark Office. Similar efforts have been conducted by Pezzoni et al. (2012) based on EPO data (the EPO-INV project):

International Migration of PCT Inventors

Different from the "ethnic matching" methods, WIPO has recently released a data set of inventors listed in PCT applications containing not only the inventors' country of residence, but also their nationality. The PCT-WIPO data set has the advantage of not needing complicated, and necessarily imperfect, algorithms to ascertain the likely origin of inventors, since the data set relies on the migratory background information revealed by inventors. ¹¹⁸

The PCT is an international treaty administered by WIPO, offering patent applicants an advantageous route for seeking patent protection internationally. The treaty came into force in 1978 and it currently has 148 contracting states.

Similar to other patent documents, PCT patent applications contain information on the names and addresses of the patent applicant(s) (the owner), but also the names and addresses of the inventor(s) listed in the patent application. What is unique about PCT applications is that, in the majority of cases, they record information on the nationality of inventors as well as their country of residence at the time of application. This information has to do with the requirement under the PCT that only nationals or residents of a PCT contracting state can file PCT applications. To verify that applicants meet at least one of the two eligibility criteria, the PCT application form asks for both nationality and residence of applicants. Moreover, it turns out that, until 2012, U.S. patent application procedures required all inventors in PCT applications to be also listed as applicants. Thus, if a given PCT application included the United States as a country in which the applicant considered pursuing a patent, all the inventors were listed as applicants and ensured that their residence and nationality information was available.

The share of inventors' names in the PCT-WIPO data set for which nationality and residence information can be retrieved is high, at around 80 percent of the cases from 1990 to 2010, although this coverage is unevenly distributed over time as well as across countries. Figures computed using the nationality information of inventors reveal that the overall pattern of inventor mobility resembles other

¹¹⁸ See Miguelez and Fink (2013) for a detailed description of the data set.

high-skilled migration patterns, and, in particular, conforms to what we know about the migration of scientists and engineers from anecdotal evidence, scattered surveys, and the media.

The large majority of immigrant inventors is concentrated in the United States—more than 50 percent. European countries follow, although with a substantial gap. The United States attracts not only the largest absolute number of immigrant inventors (bearing in mind that it is the country with the highest number of resident inventors too), but also stands out as one of the primary receiving countries relative to its population of inventors (18.5 percent) among OECD countries (figure 10.1). However, relatively small, open economies see even larger immigration rates than the United States does, namely, Belgium (19.9 percent), Ireland (20.7 percent), Luxembourg (37.7 percent), and Switzerland (40.3 percent).

Highly innovative countries, such as Germany, France, and especially Italy, Japan, and the Republic of Korea, lag in attracting foreign talent with respect to their local stock of inventors.

To investigate the contribution of immigrants to their host country economies, it is insightful to explore the number of citations received by PCT applications with and without migrating inventors. Table 10.1 presents the share of all patents with at least one listed inventor with a migratory background. The table compares this share with the share of inventors with a migratory background listed in breakthrough patents, defined as the top 5 percent of patents in terms of citations received in the following five years after application. As can be seen in figure 10.1, the proportion of immigrants is systematically larger—and statistically significant—among

FIGURE 10.1 Immigration Rate of Inventors, Average, 2001–05 and 2006–10

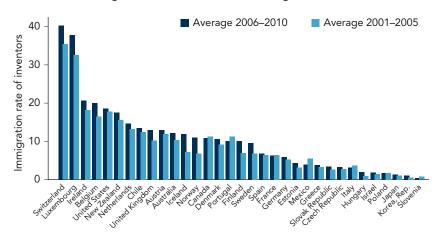


TABLE 10.1 Share of Immigrants in All Patents and Highly-Cited Patents, 1990–2010

Country	Foreigners in all patents (%)	Foreigners in 5% most-cited patents (%)	t-statistic
Australia	16.28	24.81	9.11***
Austria	12.07	13.88	1.51
Belgium	22.89	35.61	8.17***
Canada	19.49	25.09	6.68***
Denmark	14.33	23.24	7.91***
Finland	15.67	17.61	2.05**
France	11.45	17.56	13.57***
Germany	12.18	19.9	27.65***
Ireland	30.97	33.7	0.95
Italy	4.45	7.82	7.74***
Japan	3.25	4.46	9.89***
Netherlands	18.4	18.95	0.87
Korea, Rep.	2.56	2.68	0.48
Spain	10.1	15.74	5.32***
Sweden	11.08	18.29	12.42***
Switzerland	35.27	44.06	9.38***
United Kingdom	14.74	21.16	13.11***
United States	18.17	22.53	24.55***

Note: ***, **, and * indicate significance at 1, 5, and 10 percent levels, respectively.

breakthrough inventions than among the whole universe of PCT patents. This finding supports the idea that immigrants disproportionately contribute to their host country's productivity, measured here by citations received.

Conclusions and Recommendations

This chapter described how inventor data retrieved from patent applications can be used for migration research. Arguably, migrant inventor data can be used to measure high-skilled migration, to overcome some of the limitations faced by existing migration data sets. In particular, this database covers a long period, provides information on an annual basis, and includes a large number of sending and receiving countries. Moreover, inventors constitute a group of high-skilled workers of special economic importance.

Among the different possibilities of using patent data for migration research, WIPO has recently released a promising data set, which includes the residence as well as the nationality of the inventors. However, use of the PCT-WIPO data set does not come without limitations. One limitation is that the numbers do not include immigrant inventors who became citizens of the host country, thereby underestimating the migration figures. Other methods, such as "ethnic matching," could complement the use of the nationality information and mitigate this problem. Institutional support to scholars pursuing this avenue of research is critical.

More important caveats of the PCT-WIPO data set are as follows: in 2012, the United States enacted changes to its patent laws under the Leahy-Smith America Invents Act, which effectively removed the requirement that inventors be also named as applicants. Thus, PCT applicants (automatically) designating the United States became free to list inventors without facing the requirement of indicating their nationality and residence. Although the nationality information of inventors is abundant and will allow scholars to carry out many studies, the impossibility to update it to the most recent times will impede the analysis of some promising avenues of research. Therefore, future research will need to rely more prominently on "ethnic matching" methods.

An under-investigated area is the impact on "sending" countries, for which emigration rates can be inferred from the data. The numbers involved may be comparatively low, but could represent the loss of the majority of inventors from a country. Assessment of the impact will also require future research efforts.

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Chapter 11

Health

World Health Organization and International Organization for Migration 119

Key Policy Issues

The conditions in which migrants travel, live, and work often carry exceptional risks to their physical and mental well-being, and migration can therefore be regarded as a social determinant of health for migrants. This link has been acknowledged by the World Health Assembly, which adopted Resolution 61.17 on the "Health of Migrants" in 2008, in which Member States "recognized that health outcomes can be influenced by the multiple dimensions of migration." These dimensions include restrictive immigration, employment, social protection, and housing policies, namely, the reasons for which migrants often have to travel, live, and work in unsafe and unhealthy conditions.

This situation was also acknowledged by the Committee on Economic, Social and Cultural Rights, which interpreted that the right to health is not confined to the right to health care. Although it recognizes the right to available, accessible, acceptable, and quality health services, the committee also acknowledges that the right to health embraces a wide range of socioeconomic factors that promote conditions in which people can lead a healthy life, and extends to underlying determinants of health, also often referred to as social determinants of health.

Therefore, policy responses should address the underlying social determinants of migrants' health outside the health sector and the barriers that prevent migrants from accessing quality health care services. A multi-sectoral approach is required, as many of the solutions to improving migrants' health lie not only in the health sector, but also in other sectors, such as labor and immigration. For example, social protections in health for migrant workers, such as health insurance and a safe and healthy working environment, are part of labor laws and policies. Access to health care for migrants, especially undocumented migrants, is often regulated and/or influenced by immigration laws and policies. In addition, many countries' immigration laws require migrants to pass a medical exam to obtain residency status or a

¹¹⁹ This chapter was prepared by Daniel Lopez Acuna and Mariana Crespo, WHO and Barbara Rijks, IOM

work permit. Testing positive for tuberculosis, HIV, a sexually transmitted infection, or even pregnancy can exclude migrants from obtaining a work permit, or lead to deportation if the migrant is already in the country of destination.

Policies developed by the ministries of health or other line ministries should follow the four basic principles for a public health approach to address the health of migrants and host communities (WHO 2008):

- 1. Avoid disparities in health status and access to health services between migrants and the host population.
- 2. Ensure migrants' health rights. This entails limiting discrimination or stigmatization, and removing impediments to migrants' access to preventive and curative interventions, which are the basic health entitlements of the host population.
- 3. Put in place lifesaving interventions to reduce excess mortality and morbidity among migrant populations. This is particularly relevant in situations of forced migration resulting from disasters or conflict.
- 4. Minimize the negative health outcomes of the migration process on migrants' health outcomes. Migration generally renders migrants more vulnerable to health risks and exposes them to potential hazards and greater stress arising from displacement and adaptation to new environments.

What are the key policy questions on migration and health for which data and evidence are needed? To answer this question, we need to review the operational framework of the World Health Organization (WHO) resolution on the health of migrants. The Global Consultation on the Health of Migrants, organized by WHO, the International Organization for Migration, and the Government of Spain, in 2010, identified priorities and key actions along the following four pillars of the WHO resolution:

- Monitoring migrant health
- Developing and implementing migrant-sensitive policies and legal frameworks
- Promoting migrant-sensitive health systems
- Ensuring partnerships, networks, and multi-country frameworks.

The key policy questions for which data and evidence should be collected (by migrant type/status) cut across these four pillars, and include the following:

- What are the health outcomes of migrants in comparison with the host population?
- Are migrants and/or migration variables integrated in national health information systems, health surveillance surveys, and demographic health studies?
- Are health services accessible, available, acceptable, and of high quality for migrants?

- Do migrant workers have access to health insurance and other social protection measures related to their health and well-being?
- Are migrants discriminated based on their health status?
- Do migrants have the right to health care in law and policy?
- Are data collected in different countries based in harmonized, standardized indicators?
- Are health policies, protocols, and strategies aligned across borders to ensure continuity of care for migrants?
- Are migrants and migration factors integrated in national health and disease strategies and policies?
- Are health policies developed and informed by a wide range of actors, including non-health ministries and nongovernmental actors from civil society?
- Are policies that impact migrants' health coherent across the different sectors?
- Is there a department or unit within the ministry of health that facilitates multi-sectoral coordination on migration and health issues between the different ministries and nongovernmental actors?

Data Needed to Analyze the Topic

To answer these identified policy questions, qualitative and quantitative data need to be routinely collected, analyzed, and disseminated. However, caution is advised regarding how data on migrants' health are collected and disseminated, as data can be used to stigmatize and discriminate against migrants, especially data related to communicable diseases.

Most countries gather data on diseases that are associated with public health efforts to control imported or transported illness and disease. As the nature and diversity of migration evolves, migration-related economic and social factors, biological and genetic determinants of health, entitlements, and provider attitudes need to be measured to develop policies to improve the health of migrants.

Different data collection methodologies should be used, and advocacy efforts will be needed to ensure the integration of migration variables into existing data collection mechanisms. The following are a few recommendations:

- Identify and promote key standardized indicators on migrant health that are acceptable and usable across countries.
- Promote the inclusion of migration variables in existing censuses, national statistics, targeted health surveys, and routine health information systems, as well as in statistics from sectors such as housing, education, labor, and immigration.
- Use innovative approaches to collect data on migrants' health beyond traditional instruments such as vital statistics and routine health information systems.

Often migrants will avoid accessing health care services, so proactive health promotion and health screening among migrants should be done through migrant-friendly outreach activities.

- Raise awareness about data collection methods, uses, and data sharing related to migrant health among governments, civil society, and international organizations.
- Produce a standardized global report on the status of migrants' health, including country-by-country progress reports.

Considering the characteristics of contemporary migration dynamics, monitoring migrants' health should be expanded. Social determinants of health should be considered in the analysis of migrants' health. Social and economic factors influence the health of migrants; where they come from, how they travel and work, or where they reside and settle have implications for their health. Further, the definition of migrants varies from country to country, and the lack of an agreed universal definition can limit the cross-country comparability of health information. The use of standardized instruments to measure the health of migrants could contribute to define policies at the country, regional, and global levels.

Existing Sources and Standards for Data Collection

Collecting and analyzing data is a priority for monitoring migrant health and developing migration policies that protect migrants' right to health. The lack of clarity about what constitutes a migrant as well how many immigrants are in a given country condition the access to clear data on migrants' health. The collection of health data and the identification of key indicators that are useable across countries have been recognized as challenges in the Global Consultation on Migrant Health.

The thematic paper, "Monitoring Migrant Health," presented in the Global Consultation in Spain, states that information about migrants varies by country and type of data, and by mechanism to collect this information. In some countries, health assessments have been a routine component of the immigration process, while in other countries, country of birth and migration status are elements of disease surveillance and reporting. Place of origin and length of residence have been recognized as important to identify problems and improve health outcomes.

The system of collecting information also varies. Some countries with national health insurance systems collect information on citizenship or nationality without including the immigration status of the individual, while other countries may collect and record health information on the basis of ethnicity.¹²⁰

¹²⁰ Gushulak, Brian; "Monitoring migrant health", thematic paper presented in the Global Consultation on the Heath of Migrant, Spain, 2010.

Most countries gather information on diseases, which is associated with public health efforts to control imported or transported illness and disease. As the nature and diversity of migration evolve, migration-related economic and social factors, biological and genetic determinants of health, entitlements, and provider attitudes need to be measured to develop policies to improve the health of migrants.

Data Gaps and Challenges

The Operational Framework on Migrant Health outlined in the Global Consultation highlights the priorities to be addressed for monitoring migrants' health:

- Ensure the standardization and comparability of data on migrant health.
- Increase the better understanding of trends and outcomes through the appropriate disaggregation and analysis of migrant health information in ways that account for the diversity of migrant populations.
- Improve the monitoring of migrants' health-seeking behaviors and access to and utilization of health services.
- Increase the collection of data on health status and outcomes for migrants.
- Identify and map (a) good practices in monitoring migrant health, (b) policy models that facilitate equitable access to health for migrants, and (c) migrant-inclusive health system models and practices.

Good Practice

Migrant Integration Policy Index

The Migrant Integration Policy Index (MIPEX) (www.mipex.eu/) is an interactive tool and reference guide for assessing, comparing, and improving integration policy. The MIPEX project is led by the British Council and the Migration Policy Group. MIPEX has covered eight policy areas since 2014: health, labor mobility, family reunion, education, political participation, long-term residence, access to nationality, and anti-discrimination. Using 148 policy indicators, MIPEX creates a rich, multidimensional picture of migrants' opportunities to participate in society, by assessing governments' commitment to integration. By measuring policies and their implementation, the index reveals whether all residents are guaranteed equal rights, responsibilities, and opportunities. The index is widely used by policy makers in Europe, and increasingly in the rest of the world.

The health strand for MIPEX was developed in 2014, based on the Council of Europe recommendation (2011) on mobility, migration, and access to health care. The MIPEX health strand measures four elements:

Entitlement to health services.

- Policies to facilitate access
- Responsive health services
- Measures to achieve change.

MIPEX measures integration policies in most countries in Europe, North America, Australia, and Japan (34 countries total). The audit is done by independent scholars based on the country's publicly available documents.

BioMosaic

The BioMosaic partners are the U.S. Centers for Disease Control and Prevention (CDC), Harvard University, and the University of Toronto. The CDC's Division of Global Migration and Quarantine has a migration, demographics, and health information initiative in collaboration with Harvard University and the University of Toronto. BioMosaic is a software application that allows combining and visualizing immigration statistics and health and demographic data. BioMosaic shows foreign-born populations, census demographic data, and health data indicators at the U.S. county level. Targeted health communications, or public health interventions, can be developed with the application by identifying foreign-born populations clustered in specific areas, or linking census data on social determinants of health, such as income, education, language proficiency, and access to health care. BioMosaic allows routine surveillance to include migration data, as well as data collected in disasters. This practice emphasizes the importance of monitoring migrants' health and ensuring that accurate data are available to government, health staff, and planners.

Key Messages and Recommendation to Address Gaps

A WHO Secretariat report in 2007 proposed possible strategies for improving the health of migrants. One of the key areas is related to the importance of assessment, research, and information dissemination. This area includes the following:

- · Assessing the health of migrants and trends in migrants' health
- Identifying and filling gaps in service delivery to meet migrants' health needs
- Disaggregating health information by gender, age, and origin, and by socioeconomic and migratory status
- Encouraging health and migration knowledge production, including quantitative and qualitative studies.

During the Global Consultation on Migration, key actions were identified to address gaps in information on migrants' health:

• Identify key indicators that are acceptable and usable across countries.

- Promote the inclusion of migration variables in existing censuses, national statistics, targeted health surveys, and routine health information systems, as well as in statistics from sectors such as housing, education, labor, and migration.
- Use innovative approaches to collect data on migrants beyond traditional
 instruments, such as vital statistics and routine health information systems, and
 develop useful data that can be linked to decision making and monitoring of
 the impacts of policies and programs.

To address migrant health needs, an integrated approach is needed. This type of approach includes analysis of the determinants of health as well the impact of the migration process, considering that the migration process can increase migrants' vulnerability to ill health. Inequality in access to quality health services requires data that cannot be provided by the health sector alone, but through the contribution and involvement of other sectors, such as education, employment, and housing, among others, to develop integral policies to respond to migrant health needs.

Chapter 12

Education

United Nations Educational, Scientific, and Cultural Organization¹²¹

Key Policy Issues

Migration and its effects on the education of migrant and non-migrant children¹²² is a topic that deserves considerable research attention. Understanding the effects of migration on education is important, first, because of the key role of education in the "full development of the human personality and the sense of its dignity," and in the promotion of "understanding, tolerance and friendship among all nations and all racial, ethnic or religious groups." Second, there is a strong correlation between education, professional ascent, and quality of life; hence, education ranks high among the reasons for migration. Third, an ever-growing number of migrant children are enrolled in different levels of education, including in non-formal settings, with increasing mobility patterns, involving North-South-South migration flows.

The educational development of migrant children, girls and boys (as well as non-migrant children), in destination and origin countries can be positively and negatively affected by migration. A starting point for analysis is the entrenchment of migration in a human rights framework, to ensure that relevant human rights standards and principles will shape the outcomes. In addition to being a legal obligation by virtue of a country's ratification of a relevant international convention, such an approach is consonant with the commitment to further the realization of human rights embodied in the 2030 Agenda for Sustainable Development.¹²⁴

A key policy objective in destination countries is to promote the accessibility of the national education system (formal and non-formal, including technical and vocational education and training) to migrant learners, as well as the accessibility

¹²¹ This chapter was prepared by Tararas Konstantinos and Golda El-Khoury, UNESCO.

¹²² The key dimension here is the country of birth of the child as well as that of her/his parents.

¹²³ See Article 13, paragraph 1, of the International Covenant on Economic, Social and Cultural Rights at http://www.ohchr.org/EN/ProfessionalInterest/Pages/CESCR.aspx.

[&]quot;We envisage a world of universal respect for human rights and human dignity," paragraph 8, and "This is an Agenda which seeks to respect, protect and fulfil all human rights." The full text of the United Nations General Assembly Resolution 70/1, entitled *Transforming Our World: The 2030 Agenda for Sustainable Development*, is available at: http://www.un.org/qa/search/view_doc.asp?symbol=A/RES/70/1&Lang=E.

to all forms of training that leads to certification. ¹²⁵ Accordingly, policy frameworks should place emphasis on eliminating discrimination and exclusion factors, such as gender, national, or ethnic origin and migration status, ¹²⁶ from all levels and forms of education. An integral part of those efforts is the setting of legal and other frameworks and mechanisms to protect against infringements on access to education for migrant learners, including by securing recognition and validation of prior learning, and to promote tolerance and respect for diversity.

A key parameter meriting attention is the organization (that is, the tracked approach where students are allocated to schools with different focuses, as opposed to a comprehensive approach) and performance of the education system, and how it affects the learning outcomes of migrant children as an integral part of the learners' community, disaggregated by gender, migration status, national or ethnic origin, and socioeconomic status.

Destination countries should invest in developing capacities within their education systems to intake and retain migrant learners and provide them with quality education in a sustained manner. Specifically, on the educational attainment of migrants, policies and programs should address the impact on learning outcomes of such key factors as migration status¹²⁷ (undocumented, refugee, and asylum-seeker), type of migration (immigration, emigration, permanent, and temporary), ethnicity, gender, family background and home environment, cultural identity, socioeconomic status, as well as the divergences between children of first—and second-generation migrants and migrant and non-migrant children.

Responses to such factors would encompass adaptation of the structural features of the system (including such parameters as funding, availability of school infrastructure, teaching personnel and materials, teacher training, mapping of capacities and knowledge gaps, and so forth), as well as the corresponding school-level configuration.

Disadvantages relating to migration, gender, or socioeconomic status are often exacerbated by the lower-quality resources available at the school level (for instance, lack of qualified teachers, equipment shortages, and so forth). A determining factor for the successful integration of all migrants, boys and girls alike, in the education system and consequently for their educational development is the extent to which the curricula, teaching personnel, and methodology capture the

¹²⁵ On the interpretation of the International Covenant on Economic, Social and Cultural Rights provision, see the General Comment N°13 of the Committee on Economic, Social and Cultural Rights at: http://tbinternet.ohchr.org/_layouts/treatybodyexternal/TBSearch.aspx?Lang=en&TreatyID=9&DocTypeID=11. 126 According to Article 30 of the International Convention on the Rights of All Migrant Workers and Members of their Families, access to public preschool educational institutions or schools shall be without prejudice to the migration status of the child concerned or parents of the child. See General Comment N°2 of the relevant Committee at: http://tbinternet.ohchr.org/_layouts/treatybodyexternal/TBSearch.aspx?Lang=en&TreatyID=7&DocTypeID=11.

¹²⁷ This is in line with Target 17.18 on data, monitoring, and accountability of Goal 17 of the 2030 Agenda for Sustainable Development (http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E).

diversity of the classroom and show sensitivity and respect to different cultural, ethnic, or national identities.

A further necessary ingredient of such interventions is the provision for special support to migrant children and their families, particularly in the form of assistance for language acquisition (with a heritage language that is different from the language of instruction), or special care within schools, where appropriate, for their psychological well-being (for instance, in relation to the phenomenon of bullying).

At the level of origin countries, emphasis should be placed on capitalizing on the positive impact of factors such as financial and social remittances for the educational outcomes of non-migrant boys and girls, and also on minimizing the consequences of negative factors, such as prolonged family separation.

Data Needed to Analyze the Topic

Developing appropriate policies to promote the educational development of migrant children and migrant learners more broadly can only be built on a good understanding of migration patterns, the profile and size of these groups, and how these factors interrelate with their respective learning opportunities and outcomes. To this end, ideally, disaggregated data (by migrant status, gender, age, parental education and occupation, family type, ethnicity and religious or linguistic identity, socioeconomic status of students and schools, and location) will be needed.

It is unrealistic to expect that data on all the variables will be available, so it will be necessary to identify which are essential and which are desirable for a host of different contexts and aspects, including: enrollment by level of education, dropout rates, number of years at school, learning outcomes per level of education, discriminatory attitudes, and racist incidents and bullying at school. Comparing such data with data on the population of the receiving country will help build understanding of patterns of discrimination and inequalities that are the cause of low access to school, high drop-out rates, and poor learning outcomes. It will also help in designing and implementing appropriate corrective measures.

The response by competent state authorities to the challenges faced by their migrant population should be the subject of particular analysis. Information would be needed to help assess the responsiveness (showing the extent to which specific issues have been addressed) and effectiveness of the measures taken. Among others, it would be necessary to document and monitor the following:

 Policies and programs promoting respect for diversity, such as the design of school curricula, development of appropriate teaching methods, and provision of special training for teachers in general and notably for those serving in schools with high levels of diversity

- Support and assistance to migrant children and their families, when necessary, to facilitate their integration into the school environment and improve their learning outcomes (for example, through funding allotments for language learning, scholarships, student loans, and so forth)¹²⁸
- The impact of the overall organization of the education system on migrants' learning opportunities and outcomes.

Surveys and opinion polls covering migrant learners and their families, as well as the population of the receiving country, may prove an invaluable source of information on the effectiveness of the education system's response. A further indicator of effectiveness in promoting migrants' inclusion is the successful transition and access to the labor market.

Turning to origin countries, it would be useful to capture the impact of the migration of parents or siblings on the learning opportunities and outcomes of the children who are "left behind" compared with other native-born children.

Existing Sources and Standards for Data Collection

Education is a policy area that ranks high in the list of priorities in many countries, thereby explaining the wealth of available data. The data range from national-level public databases (including national censuses, information gathered by education ministries, administrative data generated at the school level, and so forth), to international data collection instruments, regional and global, and nongovernmental sources.

A considerable part of that information refers to the performance of migrant learners. For instance, at the regional level, in 2011, Eurostat presented a very interesting tool to evaluate the integration policies of European Union countries in four domains, including education. The indicator matrix and available data publicized in *Indicators of Immigrant Integration: A Pilot Study*¹²⁹ cover such issues as highest educational attainment, while exploring further the profile of low-achieving 15-year-olds in reading, mathematics, and science, and that of early leavers from education and training. The information is organized by groups of country of birth (including a comparative view of European Union and non-European Union citizens), age groups, and sex. A similar approach is followed in a brief that was published in June 2016.¹³⁰

¹²⁸ The further internationalization of tertiary education and research systems through the expansion of scholarships in favor of developing countries, in particular least-developed countries, small island developing states, and African countries, is the focus of Target 4.b of Goal 4 of the Sustainable Development Goals.

¹²⁹ The full text of the report is accessible at: http://ec.europa.eu/eurostat/documents/3888793/5849845/KS-RA-11-009-EN.PDF/9dcc3b37-e3b6-4ce5-b910-b59348b7ee0c.

¹³⁰ An article on Migrant Integration Statistics: Education, published on June 10, 2016, is available at: http://ec.europa.eu/eurostat/statistics-explained/index.php/Migrant_integration_statistics_-_education.

Another international source on the learning outcomes of migrants is the Organisation for Economic Co-operation and Development (OECD) Programme for International Student Assessment (PISA). 131 This survey, which takes place every three years, assesses the extent to which 15-year-olds have acquired the knowledge and skills that are essential in everyday life, while also taking into account the organization of schools. The 2012 survey, conducted in 34 OECD member countries and 31 partner countries and economies (from Africa, Asia, the Middle East, and Latin America), examined, among other outcomes, student performance in mathematics, science, and reading in relation to migrant background and also in conjunction with factors such as socioeconomic status, the language spoken at home, and first—and second-generation status.¹³² Useful conclusions for migrants can be drawn, despite inherent limitations, from the OECD's Programme for International Assessment of Adult Competencies (PIAAC), which generates data on the competencies of adults (ages 16-64 years) in literacy, numeracy, and problem-solving in a technology-rich environment. 133 The educational attainment of migrants is also reviewed in the context of specialized migration-related OECD databases.¹³⁴ United Nations Educational, Scientific, and Cultural Organization Institute for Statistics (UNESCO) publishes relevant information, collected through the UNESCO Institute for Statistics (UIS)¹³⁵ and other sources, on the situation in countries across the world, in the Global Education Monitoring (GEM) report. 136

At the national level, countries collect information on the educational performance of students and, in many cases, attention is paid to the performance of migrants, although data disaggregation on several key features differs significantly from one country to another. Turning to nongovernmental sources, the Migration Integration Policy Index (MIPEX) assesses the integration policies in 38 countries, with education included among the seven policy areas under review.¹³⁷

¹³¹ The document containing the key findings of the 2012 PISA is available at: http://www.oecd.org/pisa/keyfindings/PISA-2012-results-volume-vi.pdf.

¹³² An interesting publication was released in 2012 within the context of PISA, entitled "Untapped Skills: Realising the Potential of Immigrant Students," and is accessible at: http://www.keepeek.com/Digital-Asset-Management/oecd/education/untapped-skills_9789264172470-en#page41.

¹³³ The main limitations to the conclusions relating to migrants derive from the size and/or representativeness of the migrant sample base, as well as from the difficulty in making a clear distinction between language and "general" literacy skills. See PIAAC's dedicated website at: http://www.oecd.org/site/piaac/. An example of how the PIAAC findings could be used for deepening the analysis on migrants' educational attainment is a relevant study by the Migration Policy Institute at: http://www.migrationpolicy.org/research/through-immigrant-lens-piaac-assessment-competencies-adults-united-states.

¹³⁴ http://www.oecd.org/migration/mig/oecdmigrationdatabases.htm.

¹³⁵ The UNESCO Institute for Statistics online Data Centre can be accessed at http://www.uis.unesco.org/datacentre.

¹³⁶ The annual GEM report (formerly known as the Education for All Global Monitoring Report, which was published until 2015) focuses on progress toward the education targets in the new Sustainable Development Goals. See more on GEM at: http://en.unesco.org/gem-report/. The 2015 Education for All Global Monitoring Report on achievements and challenges of 2000–15 is available at: http://unesdoc.unesco.org/images/0023/002322/232205e.pdf. The text of all reports published since 2002 is available at: http://en.unesco.org/gem-report/reports.

¹³⁷ For more information about MIPEX, consult: http://www.mipex.eu/education.

Data Gaps and Challenges

A first set of challenges in the effort to assess the impact of migration on education outcomes relates to the complexity of the issue. ¹³⁸ Establishing causal links explaining a specific failure of the system is particularly difficult due to several parameters, such as endogeneity, selectivity, and omitted variable problems. That difficulty is further strengthened by the fact that educational outcomes can be explained by factors that are unobservable or difficult to isolate. Another manifestation of that complexity pertains to the presence of indirect socioeconomic effects, such as the extra burden imposed by migration on members in the origin household; the transfer of knowledge, information, and values between migrants and their families; and the emotional stress on children caused by family separation. Assessing the influence of these factors on the overall impact of migration on education outcomes is a challenging task.

Further to these challenges, the task is rendered more difficult by the limited availability of quality data, especially on migrant characteristics. A careful look at the data sources mentioned in the previous section shows that even in countries and regions with a considerable amount of information, the scope of analysis could be further expanded to capture more accurately the situation of the whole array of different migrant learners. This expansion should happen in two directions. First, the level of data disaggregation should be further strengthened. For instance, databases, such as those generated by the OECD PISA surveys or the Eurostat Migrant Integration Index, focus on the combined effect of only a selected few of the following important factors: sex, country of citizenship (although restricted to a comparison between European Union and non-European Union citizens), socioeconomic status, language spoken at home, and first—versus second-generation status. Thus, the analysis omits from consideration parameters such as migrant status, national or ethnic origin, religious identity, and school location. Although the UNESCO World Inequality Database on Education, 139 which is connected to the GEM, covers a host of disparity factors, including gender, wealth, ethnicity, religion, and location, migration status is not part thereof. A second expansion concerns the key domains where student performance is measured. Assessment of the educational attainment of students should become more holistic, so as to align with the core objectives of education, as established by international human rights conventions, the understanding of universal human rights values and respect for people from different civilizations, cultures, and religions being a prerequisite for inclusion.¹⁴⁰

¹³⁸ For a brief discussion on data and methodological challenges, see Human Development Research Paper 2009/57, Migration and Educational Outcomes of Children, by K. A. Schapiro, p. 1, at: http://hdr.undp.org/sites/default/files/hdrp_2009_57.pdf.

¹³⁹ For more information on the World Inequality Database on Education, see http://www.education-inequalities.org/.

¹⁴⁰ On this issue, see the report of the Special Rapporteur on the Right to Education to the 26th Session of the Human Rights Council, entitled Assessment of the Educational Attainment of Students and the Implementation of the Right to Education (Document A/HRC/26/27), available at: http://www.ohchr.org/EN/HRBodies/HRC/RegularSessions/Session26/Documents/A_HRC_26_27_ENG.DOC.

This vision was endorsed by the 2030 Agenda for Sustainable Development, which embodies a commitment to ensure "...that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development." ¹⁴¹

These observations apply a fortiori to other regional and international assessment mechanisms, such as the Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ), ¹⁴² the Latin American Laboratory for Assessment of the Quality of Education, LLECE), ¹⁴³ and the Program for the Analysis of Education Systems (PASEC), ¹⁴⁴ where migrant educational outcomes are insufficiently captured. Furthermore, scarce information is available on the numbers of migrant children and learners benefiting from the different support schemes conceived to increase their school attendance and improve their performance. On the specific issue of scholarships for enrollment in cross-border higher education programs, with emphasis on developing and least-developed countries, a boost in data availability is expected, owing to the dedicated Target 4.b of the Sustainable Development Goals (SDGs). Within this context, attention would need to be paid to access by disadvantaged groups. Likewise, existing instruments do not cover issues on the cultural appropriateness of the school environment for students with a different identity—ethnic, cultural, or other.

Good Practice

Collecting data on student enrollment and performance, with student and school characteristics, makes it possible to identify various gaps in access, participation, and educational achievements between immigrant and native-born students. In this respect, the OECD's Review of Migrant Education, which includes six country studies (Austria, Denmark, Ireland, the Netherlands, Norway, and Sweden), serves as a quick reference guide for policy makers in the process of policy design and implementation in different settings for immigrant students. The review indicates that governments typically use eight tools to steer migrant education policy at the national and regional/local levels. These tools include (a) setting explicit policy goals for immigrant students within broader education policy goals; (b) adopting regulations and legislation; (c) designing effective funding strategies; (d)

¹⁴¹ See Target 4.7 of Sustainable Development Goal 4, at: http://www.un.org/ga/search/view_doc. asp?symbol=A/RES/70/1&Lang=E.

¹⁴² For more information on SACMEQ see: http://www.sacmeq.org/.

¹⁴³ For more information on LLECE see: http://www.unesco.org/new/en/santiago/education/education-assessment-llece/.

¹⁴⁴ For more information on PASEC see: http://www.confemen.org/le-pasec/.

¹⁴⁵ OECD (2010a). OECD Reviews of Migrant Education. Closing the Gap for Immigrant Students: Polices, Practices and Performance. Paris: OECD. Available at: http://www.oecd.org/edu/school/oecdreviewsofmigranteducation-closingthegapforimmigrantstudentspoliciespracticeandperformance.htm.

establishing standards, qualifications, and qualification frameworks; (e) establishing curricula, guidelines, and pedagogy; (f) building capacity (especially training and teacher support); (g) raising awareness, communication, and dissemination; and (h) monitoring, research, evaluation, and feedback. Among these tools, collecting information about migrant students is the key for monitoring progress and advancing research on migrant education.

The case of the Netherlands offers good examples of data collection that provide useful evidence for policy making on migrant education. Educational assessment data are available by individual students with due account of their belonging to different ethnic groups. This allows evaluation of their performance, establishing certain patterns by student profile, and comparison of their performance with that of native Dutch students. The assessments include comparisons of the national longitudinal study COOL¹⁴⁶ (formerly PRIMA, a cohort study in primary education), the national standard assessment at the end of primary education (the CITO test), periodic subject-specific assessments (Periodic Assessment of Educational Achievement), and international surveys (PISA, Progress in International Reading Literacy Study, and Trends in International Mathematics and Science Study). The data generated through these different sources serve as a basis, among others, for school-level responses, taking the form of teacher training and inspection. Accordingly, the Netherlands Education Inspectorate assesses schooling quality for native and migrant students through periodic quality assessments of each school, and identifies underperforming schools. The Education Inspectorate works with schools that are graded as "insufficient quality" to develop plans for improvement, and then follows up to verify whether improvements are made. 147

At the international level, PISA is an example of good practice in testing the skills and knowledge of 15-year-old native-born and migrant students, on a cross-country comparable basis.

Recommendations

With due consideration of the preceding information and analysis, the following recommendations could be put forward to address the data gaps and challenges:

 Increase the disaggregation of data to cover such factors as gender, migration status, ethnicity, first—and second-generation status, type of migration, country of origin, socioeconomic status, language spoken at home, and so forth, The collection of these data should be systematic, to capture the divergent opportunities and outcomes of respective migrant profiles with regard to education. Efforts should be made to build on good practices for data collection

¹⁴⁶ These are Dutch acronyms for the studies, for example, the Cohort Survey School Careers (Cohort Onderwijsloopbanen: COOL)

¹⁴⁷ The full text of the report OECD Reviews of Migrant Education: Netherlands is accessible at: http://www.oecd.org/netherlands/44612239.pdf.

for economic, social, and cultural determinants of migrants' access to and performance in the education system, expanding it to countries where such data are not available, and making optimal use of opportunities created by the focus of the SDGs, including on the availability of scholarships to developing countries for enrollment in higher education (Target 4.b).

- Expand existing platforms and instruments for data collection to include information on migrants' educational attainment, such as the GEM report, the UIS databases on various issues (such as learning outcomes, out-of-school children, education finance, and so forth), the OECD PISA, OECD migration databases, as well as PIAAC, the Eurostat index, the SACMEQ, LLECE, and PASEC instruments and methodologies, and so forth.
- Collect information, notably by using such tools as surveys and opinion polls, on the cultural appropriateness of the school environment and teaching methodologies for all learners.
- Make better use of available data on labor market integration by immigrants as an indicator of educational attainment.
- Exploit data generated by non-official/governmental sources, including MIPEX¹⁴⁸ and the European nongovernmental Platform on Asylum and Migration.¹⁴⁹
- Build the capacities of countries to improve and expand data collection on migrants' educational attainment. This will increase the comparability of information and thus will help in identifying viable, context-specific solutions.
- Learn from the experiences of countries with large immigrant populations (like Australia, Canada, France, Germany, Sweden, the United Kingdom, the United States, and others) about how to adapt education systems to accommodate immigration and put in place education information systems to monitor students' school performance pathways, including those of students with migration backgrounds.

¹⁴⁸ http://www.mipex.eu/.

¹⁴⁹ http://www.ngo-platform-asylum-migration.eu/.

Chapter 13

The Environment, Climate Change, and Disasters: Mainstreaming Migration into Climate Change Adaptation, Disaster Risk Reduction, and Development Plans

International Organization for Migration, Global Migration Data Analysis Centre¹⁵⁰

Introduction

Environmental features and dynamics underpin the economic, cultural, and social development of communities and societies. In parallel with the intensification of the impacts of human activities on natural resources and ecosystems, the world is currently undergoing abrupt change in several key environmental features (for example, the biodiversity rate, concentration of pollutants, soil fertility, and temperature of oceans and the atmosphere (Rockström et al. 2009)). This change will likely progressively redefine the characteristics of ecosystems at the global level, and therefore the (pre)conditions of human practices, including human mobility.

Although there are documented examples of pollution or manmade environmental degradation directly leading to migration (for example, Pripyat next to the Chernobyl Nuclear Power Plant, Aral Sea; see, for instance Brummond (2000); McLeman (2011)), climate change has been most often singled out for its potential to influence mobility patterns. The Intergovernmental Panel on Climate Change (IPCC) recognized in its first report in 1990 that climate change is likely to impact human mobility (IPCC 1990). This impact has been consistently confirmed in subsequent reports, as the exacerbating effects of global warming on environmental degradation and the frequency and intensity of climate—and weather-related hazards has become clearer. At the same time, migration in the context of environmental factors can be linked to slow-onset disasters and events, such as sea level rise, desertification, and droughts. This chapter focuses on human mobility in the context of environmental degradation and climate change. The chapter covers not only international

¹⁵⁰ This chapter was prepared by Susanne Melde, Research and Policy Officer, IOM's GMDAC.

migration, but also internal migration, which is believed to represent the largest share of movements linked to environmental causes, including disasters.

Key Policy Issues

With the rising importance of climate change on the international agenda, estimates of 200 million and 1 billion people moving due to environmental factors have sprung up. However, those numbers seem to be inflated, and represent guesstimates with a weak evidence base (IPCC 2007; Foresight 2011; Laczko and Piguet 2014).

A key challenge is the lack of uniform application of the United Nations definitions of international migration. This confusion has led to many contested terms, such as "climate refugee," being used in the media. The reference to refugees is inadequate, as this status is linked to concrete grounds of the Geneva Refugee Convention and the environment is not among them.

The International Organization for Migration (IOM) has proposed the following working definition:

"Environmental migrants are persons or groups of persons who, predominantly for reasons of sudden or progressive changes in the environment that adversely affect their lives or living conditions, are obliged to leave their habitual homes, or choose to do so, either temporarily or permanently, and who move within their country or abroad." (IOM 2011, 33)

This definition encompasses internal and cross-border movements, as most environmental migration takes place within countries. The definition also reflects the range of movements, from voluntary on the one side, to forced migration on the other (as in the case of displacements), as well as temporary and permanent movements. Internal migration is often not on the agenda of policy makers, who tend to focus on international movements into countries, which are in the portfolio of the ministries of the interior of destination countries.

Although the positive links between migration and development have been increasingly recognized over the past decade, in the context of the environment and climate change, human mobility is often considered a failure rather than an opportunity. The potential risks of human mobility have been thoroughly explored, but its beneficial effects are still largely absent from policy and practice.

However, the IPCC has recently recognized that migration is an adaptation strategy to a changing climate, and is already occurring worldwide (IPCC 2014). Migration allows modifying exposure and vulnerability to climate and environmental stressors, including through temporary and circular labor migration schemes, internal and international remittances, and planned relocation (IOM 2014). Migration can also lead to higher vulnerability in the case where migrants move into hazardous areas

that are prone to landslides and flooding. Remittances are often the first financial support sent by family members in the aftermath of disasters. However, hardly any data exist to measure the impacts of remittances on resilience to environmental and climate change and the impacts, such as land degradation, soil and coastal erosion, sea level rise, and salinization, to name a few.

The links between movements within countries and across borders and environmental factors and disasters have not received enough attention so far, including in terms of preparedness and increasing resilience before moving becomes the only option. At the international level, the Parties of the United Nations Framework Convention on Climate Change decided in the 2010 Cancún Agreement that the following was needed:

Measures to enhance understanding, coordination and cooperation with regard to climate change induced displacement, migration and planned relocation, where appropriate, at the national, regional and international levels. (Article 14 f, Section II, Cancún Agreement)

Similar information was requested in 2012 in the context of loss and damage linked to climate change. The 2015 Paris Agreement refers to migration in the introduction, and establishes the Warsaw International Mechanism to address displacement in the context of climate change in the agreement's section on loss and damage.

Mobility can reduce pressures on ecosystems in origin areas. Yet, not all movements are away from hazards. Movements can actually lead to greater vulnerability and exposure to risk, if people end up settling in degraded or hazardous destination areas. In the context of urbanization, for instance, many poorer internal and international migrants may move into marginal, at-risk locations in the outskirts of large urban agglomerations. Institutional and market failures in planning land use and development and providing adequate housing, lack of adequate infrastructure for large populations, and lack of access to social services and information can mean that those persons settle in areas prone to land and mud slides, floods, and sea level rise, thus further increasing their vulnerability (Foresight 2011). These matters relate to general issues of urbanization, development, and disaster risk reduction, not just environmental migration.

Population flows into informal settlements, like other large-scale movements, also have impacts on the environment. Environmental migration is thus not unidirectional, because the environment can influence the decision to move, but at the same time mobility can impact the environment in turn. These effects reflect the interlinkages between migration and development.

In other cases, people may not be able or want to use mobility as a coping or adaptation strategy (for example, due to lack of financial resources, knowledge and information, social networks, and alternatives elsewhere), and might therefore be "trapped" in affected areas (Foresight 2011, 25). These groups present specific

vulnerabilities in the face of disasters and environmental change, and need to be integrated into comprehensive policy and operational responses.

Although international protection and durable solution frameworks and institutions exist for people displaced internally by disasters (through the United Nations Guiding Principles on Internal Displacement and the Camp Coordination and Camp Management cluster of the Inter-Agency Standing Committee), protection issues arise when movements occur across borders. Cross-border displacement has been approached bilaterally and unilaterally. The Agenda on the Protection of Cross-Border Displaced Persons in the Context of Disasters and Climate Change was adopted by 109 country delegations in October 2015, an outcome of the Nansen Initiative led by Norway and Switzerland.

Data Needed to Analyze the Topic

Most research focuses on the links between migration and the environment as a driver, and is qualitative in nature. Comparable quantitative, longitudinal data are needed to assess how mobility—encompassing migration, displacement, and planned relocation—can be a beneficial adaptation strategy, and what potential risks need to be minimized.

The IOM has developed concrete indicators for the implementation of the United Nations Plan of Action on Disaster Risk Reduction for Resilience (2013). Under target 1 of "Reducing exposure to hazard and to lessen the impact of crises on development, including by facilitating mobility that enhances resilience," collection of the following data is necessary:

- Migration as an indicator of exposure in areas prone to disasters and environmental degradation:
 - Relative percentage of outmigration from affected areas (including permanent, temporary, partial, and circular migrations, internal and international)
 - Demographic trends in the number of people living in high-risk areas, taking
 into account migrants moving to these high-risk areas (especially in urban
 areas); the methodology should also measure the impact of incentive and
 coercive actions for planned relocation out of high-risk areas
- Migration as an indicator of resilience:
 - Percentage of households at risk having access to outsourced resources
 - Flow of migrant resources (financial and human, internal and diaspora remittances) channeled in recovery
 - Percentage of spontaneous, sustainable returns over the number of displaced.

The next step would be to operationalize these data.

Existing Sources and Standards for Data Collection

From the data types described, the following available data sources are currently being used:

- The University of Neuchatel developed a database, called "CLIMIG," on existing studies (qualitative and quantitative) on the topic: http://climig.omeka.net/.
- The thematic working group on "Environmental Change and Migration" of the Global Knowledge Partnership on Migration and Development has put together an annotated bibliography on the topic, which is also available in an online compendium on the "Environmental Migration Portal": www. environmentalmigration.iom.int.
- The Internal Displacement Monitoring Centre publishes annual reports on people displaced by disasters, building, and other sources, on IOM's country and Displacement Tracking Matrix (DTM) data: http://www.internal-displacement.org/.
- IOM and Sciences Po Paris produced the first "Atlas on Environmental Migration" (Ionesco, Mokhnacheva, and Gemenne 2016).
- Big data generated by mobile phone users after disasters, such as in Haiti and the Philippines, to indicate where displaced persons moved, to target assistance, or big data on internal movements. Big data can be a means to collect better data in the future (Laczko and Rango 2014).
- Predictive analytics are used to inform action. Examples include the High-End Climate Impacts and Extremes project, which provides research on climate impacts in relation to varying global warming scenarios (2, 4, and 6 degrees Celsius): http://helixclimate.eu/home. IOM's DTM data are used to forecast displacement and address it, as well as to identify protection risks through analyzing data patterns, revealing insights such as tensions with host communities and irregular food distributions in the Philippines, and increasing incidents of sexual violence after typhoon Haiyan in 2013.

Existing standards that are available to guide countries in developing relevant data sources are the following:

- "First generation": for qualitative approaches, the Environmental Change and Forced Migration project development questionnaires.
- "Second generation": household surveys have been developed, among others, by the "Where the Rain Falls" project by the United Nations University's Institute for Human Security and Care International (http://wheretherainfalls. org/), International Centre for Integrated Mountain Development, ETH Zurich, Columbia University, and Princeton University.
- "Third generation": a research consortium of six universities led by IOM developed a survey approach focusing on how different forms of mobility, such as migration, displacement, and planned relocation, can

benefit or pose challenges to adaptation to environmental and climate change (www.environmentalmigration.iom.int).

- IOM developed standards for its DTM of internally displaced people that can
 be used by any country. In addition, unmanned aerial vehicles (UAVs) have
 been used in Haiti and South Sudan to depict areas that have been affected
 by natural disasters. The small drones take pictures, which are compared with
 preexisting ones, such as Google Earth images, to identify affected areas and
 populations for disaster relief. UAVs can be used in humanitarian response, but
 also for preparedness, such as in Nepal where aerial images were used in 2011 to
 identify open spaces that were later used in the humanitarian response in 2015.
- For disaster risk reduction and planned relocation, census data and other available survey, disaster risk, and loss data at the national and local levels can be used. Civil protection agencies also collect data on displacement.
- Assessments on displacement, vulnerability, and durable solutions, such as by IOM and the Brookings Institute for Haiti and the Philippines.
- Evaluation of post-disaster shelter interventions in Pakistan, and their effect on local coping strategies and resilience, by IOM through the shelter cluster of the United Nations.

Data Gaps and Challenges

Although qualitative studies exist, comparative surveys across countries are lacking. To date, only a few countries are covered by existing research, which is not representative and applies different methodologies and underlying definitions. To address this gap, "Migration, Environment and Climate Change: Evidence for Policy," a project funded by the European Union, has developed a cross-country comparative analysis of five pilot countries. The questionnaire is available for replication elsewhere.

Environmental migration is difficult to quantify. The environment is hardly ever the sole driver of migration, with socioeconomic, political, demographic, and cultural factors playing a driving or impeding role (Laczko and Aghazarm 2009; Foresight 2011). For this reason, IOM's definition of environmental migration refers to people moving "predominantly for environmental reasons." The definitions used for "displacement" may also vary across countries, compromising comparisons.

Key Tools: Migration and Environment Country Assessments, the Displacement Tracking Matrix, and Drought-Induced Displacement Modeling

An example of current best practice is to prepare a national assessment on migration and the environment. In this stock-taking exercise, existing data, studies, and policy frameworks on human mobility and the environment are reviewed and analyzed. The document brings all the relevant data together in one document, and identifies knowledge gaps and vulnerable populations residing in areas at high risk of environmental hazards. The report furthermore builds on discussions with policy makers from different ministries, civil society, and academics. A first example is "Assessing the Evidence: Environment, Climate Change and Migration in Bangladesh" (IOM 2010); similar assessments have been conducted in the six countries of the Migration, Environment and Climate Change: Evidence for Policy project.

The DTM is an information management mechanism. It was developed by IOM to collect baseline information on internally displaced persons and their conditions in the location in which they have temporarily settled in the aftermath of a natural disaster. DTM collects and shares information relevant to all sectors of assistance (such as water and sanitation, food, individual documentation, and so forth), making the resultant DTM data targeted and useful to all the humanitarian actors involved in the response when data collection may not be a priority, despite its importance. The system acts as a referral mechanism by flagging urgent concerns to relevant sectoral coordination focal points or national disaster management authorities for follow-up. The aim is to ensure that displaced populations are living in conditions that meet the minimum requirements as defined by internationally agreed standards.

Continually tracking and understanding changes in mobility is pivotal to civil protection, and empowers national authorities to respond better to current crises and enhance preparedness for future displacement situations. DTM's adaptability and continuous information collection make it suited to the long-term assessment needs of national authorities and humanitarian partners. DTM collects information on impacts on host communities, durable solutions, resilience, and vulnerability. It could potentially be expanded to analyze resilience, such as in the hybrid displacement and household survey database used in Afghanistan. The concept of the DTM originated in 2004 during the response to large displacement in Iraq, and has since been deployed and refined in other countries, including Haiti, Pakistan, Mali, the Philippines, and South Sudan.

The Internal Displacement Monitoring Centre has developed a model to simulate drought-induced displacement in the Horn of Africa. This policy tool was tested in northern Kenya. The tool can help in taking stock of existing data and showing how different environmental and climatic changes, demographic developments, and policy options (development, adaptation, and humanitarian policies) yield

different results and impacts for target populations in the next 5 to 50 years. A key challenge is to access reliable data to be able to make robust forecasts.

Key Messages and Recommendations to Address Gaps

Several important movements are already taking place due to soil erosion, droughts, desertification, floods, and other slow processes and rapid onset events. Therefore, human mobility needs to be systematically integrated into existing and future plans on climate change adaptation and development, disaster risk reduction, land policies, as well as humanitarian protection and response.

The first step needs to be an assessment phase of identifying what data and information exists, mapping the legal and policy frameworks, and identifying vulnerable populations and resulting institutional and planning gaps. Based on this stocktaking, the necessary data need to be collected according to the identified needs (Melde and Lee 2014). The Glossary on Environmental Migration provides a reference for the existing definitions (IOM 2011).

At the same time, environmental and climatic factors need to be integrated into migration policies. Those factors include Disaster Risk Reduction (DRR) early warning measures, and mitigation and adaptation policies.

Recommendations include linking census data with climatic information to identify environmental and climate hotspots in areas of high population density; adding an environment component to existing population and migration surveys, such as censuses and living standards measurement and housing surveys; and the use of innovative means of data collection, such as UAVs, to produce images of settlements affected by disasters.

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Part 4 Protection of Migrants

Chapter 14

Human Rights of Migrants

Office of the United Nations High Commissioner for Human Rights (OHCHR)¹⁵¹

Key Policy Issues

States have the duty to respect, protect, and fulfill the human rights of all individuals within their territory and subject to their jurisdiction, including migrants, regardless of their legal status or circumstances, and without distinction of any kind. These human rights obligations should underlie the laws, policies, and practices in countries of origin, transit, and destination.

Under a human rights—based approach, migration and development-related laws, policies, and practices should be anchored in this system of rights and corresponding state obligations. Such an approach is normatively based on international human rights standards, and operationally aimed at promoting and protecting human rights. ¹⁵² In that sense, human rights standards and benchmarks should be an integral dimension of the design, implementation, monitoring, and evaluation of such policies and programs, and states should strive to ensure that they are responsive to the human rights of all migrants, with a particular focus on the most marginalized and excluded.

To develop and implement evidence—and human rights—based migration and development policies and programs (as well as other related policies, such as on education, health, and social protection), it is essential to have valid, relevant, and disaggregated data on the conditions in which migrants and their families live and work. These data include quantitative and qualitative information on migrants' access to adequate housing, nutritious food, quality education, clean water and sanitation, justice, health facilities, and goods and services in a nondiscriminatory and participatory way. These data, which should be disaggregated on the basis of sex, age, nationality, and migration status, are similarly of crucial relevance for

¹⁵¹ This chapter was prepared by Carolina Hernandez, OHCHR.

¹⁵² For an analysis on how a human rights perspective can enhance the design and implementation of international migration and development policies, see: Report of the Secretary-General to the UN General Assembly on the Protection of Migrants, A/68/292.

measuring progress in the effective protection, promotion, and fulfillment of the human rights of all migrants and their families.

The use of human rights indicators ¹⁵³ that are relevant to migrants and their families can address several purposes, including:

- Informing and assessing migration and related public policies on matters such as: access to education, health care, social security, and work, among others.
- Comparing the level of human rights realization between:
 - Migrants in different countries of transit and destination, for better understanding of the impact of public policies on migrants' living conditions
 - Migrants and native-born nationals who live in the same country
 - Different groups of migrants, according to their sex, age, ethnic origin, national origin, status, or other social conditions.
- Identifying legal or practical barriers to the enjoyment of human rights of
 migrants, with a focus on the most often marginalized and excluded, such as
 the low—and middle-skilled workers in specific sectors (such as agriculture,
 construction, fisheries, mining, and domestic work), temporary migrants, or
 migrants in an irregular situation.
- Monitoring the implementation of states' obligations regarding migrants' human rights, by United Nations bodies and other international and regional human rights mechanisms.

Although data collection and analysis in the field of migration and development has improved considerably in recent years, migration-related policy is often made in a glaring absence of data, frequently in direct reaction to hostile or even xenophobic public discourse. In addition, when data are available, they are often incomplete. Data on the stocks and flows of migration populations seldom provide details of the human rights circumstances of migrants and their families, including their access to health, education, social protection, or an adequate standard of living. Moreover, most official data systems also fail to capture the number of migrants who are in an irregular situation, as well as their living and working conditions. ¹⁵⁴

Furthermore, a critical lack of data collection on the rights of migrants and disaggregation by migration status often conceals exclusion and inequalities, and makes it difficult to measure progress and dismantle patterns of discrimination, leading

¹⁵³ A human rights indicator is "specific information on the state or condition of an object, event, activity or outcome that can be related to human rights norms and standards; that addresses and reflects human rights principles and concerns; and that can be used to assess and monitor the promotion and implementation of human rights." See: Office of the United Nations High Commissioner for Human Rights, Human Rights Indicators: A Guide to Measurement and Implementation, 2012, p. 16, available at: http://www.ohchr.org/EN/Issues/Indicators/Pages/HRIndicatorsIndex.aspx.

¹⁵⁴ For more information, see Committee on Migrant Workers, Day of General Discussion on the role of migration statistics for treaty reporting and migration policies, April 2013, available at: http://www.ohchr.org/EN/HRBodies/CMW/Pages/DGD2013.aspx.

to further inequalities and increased vulnerability. At the same time, accurate data collection on migrants' enjoyment of their rights and their contribution to development can enhance a more accurate understanding of migration and the situation of migrants, and thus address negative public perceptions of migrants.

Data Needed to Analyze the Topic

To monitor and assess the effective promotion, protection, and fulfillment of human rights, the Office of the United Nations High Commissioner for Human Rights (OHCHR) developed a methodological framework to identify human rights indicators: "Human Rights Indicators: A Guide to Measurement and Implementation." ¹⁵⁵ The guide translates universal human rights standards into qualitative and quantitative indicators. The indicators are offered as practical tools to operationalize human rights obligations into law, policy, programs, budget allocations, and their results for monitoring implementation.

Following this methodology, the OHCHR, United Nations Children's Fund (UNICEF), International Labour Organization (ILO), and Migrant Forum in Asia, under the umbrella of the Global Knowledge Partnership on Migration and Development (KNOMAD), developed a set of human rights indicators that are relevant to migrants and their families, with an initial focus on the rights to health, education, and decent work. The document "Human Rights Indicators for Migrants and Their Families" ¹⁵⁶ spells out the essential attributes of the rights enshrined in international instruments, and translates these rights into contextually relevant indicators for implementing and measuring the enjoyment of human rights by migrants, particularly at the national level. ¹⁵⁷ This initiative also aims to promote improvements in data collection and analysis, as well as collaboration within different stakeholders, recognizing the complementary roles of governmental bodies, public services, statistical offices, national human rights institutions, and academic and nongovernmental organizations.

The existence of reliable and valid quantitative and qualitative data is critical for human rights indicators to be effective. At the same time, the development of human rights indicators can help identify the types of data that need to be collected.

To illustrate, some of the human rights indicators that track the degree to which states ensure the right of migrants to education include the following:

Available at: http://www.ohchr.org/EN/Issues/Indicators/Pages/documents.aspx.

¹⁵⁶ KNOMAD's Working Paper No. 4, Human Rights Indicators for Migrants and their Families, 2015, available at: http://www.knomad.org/docs/migrant_rights/KNOMAD%20Working%20Paper%205%20 Human%20Rights%20Indicators%20for%20Migrants.pdf.

¹⁵⁷ The second phase of this project aims to refine and asses the relevance of the human rights indicators at the national level, and to identify gaps and data sources, through two pilot national consultations in Mexico and Tunisia. For more information, see: http://www.ohchr.org/EN/Issues/Migration/Pages/ConsultationIndicators.aspx.

- Laws explicitly establishing the right to compulsory education for all migrants, regardless of migration or residence status, equal to nationals
- Proportion of migrants enrolled in education centers, disaggregated by migration or residence status, gender, sex, ethnic origin, nationality, nationality of parents, place of residence, length of residence, and socioeconomic status
- Percentage of children and adolescent migrants who attend and finish compulsory education, disaggregated by migration or residence status, age, gender, ethnic origin, nationality, nationality of parents, place of residence, and length of residence.

Other illustrative indicators on the rights of migrants to the enjoyment of the highest attainable standards of physical and mental health include the following:

- Recognition of migrants' right to health in law, including its scope based on the type of health service (for example, emergency only) and migration or residence status
- Proportion of migrants with health insurance, disaggregated by sex, national and ethnic origin, migration or residence status, and place of residence
- Rates of (a) mortality, (b) morbidity, (c) life expectancy, and (d) prevalence of diseases, disaggregated by migration or residence status, age, gender, sex, ethnic origin, nationality, nationality of parents, place of residence, length of residence, and specific disease.

Existing Sources and Standards for Data Collection

Data Sources

Some of the data-generating mechanisms currently being used for human rights assessments, and that could be used in relation to migrants' human rights, include: 158

- a. Socioeconomic and administrative statistics, such as administrative data, statistical surveys, and censuses, including:
 - Country-based labor force and household surveys and censuses
 - Country-based population registries¹⁵⁹
 - Administrative records (for example, on numbers of migrants in immigration detention, deaths at borders, and return figures)
 - Regional statistical bodies, such as Eurostat¹⁶⁰

See: OHCHR, Human Rights Indicators: A Guide to Measurement and Implementation, 2012, pp. 51–69.
 For example, Spain's Municipal Population Register, at http://www.ine.es/en/prensa/padron_prensa_en.htm.
 As an example, the forced migration questionnaire includes a question on difficulties confronted

¹⁶⁰ As an example, the forced migration questionnaire includes a question on difficulties confronted during the migration journey (arrest/detention; refoulement; and maltreatment, including rape, extortion by border officials, smuggling, trafficking, and others). http://epp.eurostat.ec.europa.eu/portal/page/portal/product_results/search_results?mo=containsall&ms=migration&saa=&p_action=SUB-MIT&l=us&co=equal&_ci=,&po=equal&_pi=,&gisco=exclude.

- United Nations Population Division's Global Migration Database¹⁶¹
- UNHCR Statistical Online Population Database¹⁶²
- Organisation for Economic Co-operation and Development (OECD) Database on Immigrants in OECD Countries.¹⁶³
- b. Events-based data on human rights violations and abuses (for example, denial of primary education to migrant children, arbitrary or indefinite detention of migrants, labor exploitation of migrant domestic workers, failure to provide essential or emergency medical care to migrants in an irregular situation, and collective expulsion of migrants), such as information provided by the media and reports of states, civil society organizations, national human rights institutions, and international human rights monitoring mechanisms. The events-based data provided by the international human rights monitoring mechanisms can be found in:
 - OHCHR Universal Human Rights Index, which provides human rights information emanating from international human rights mechanisms in the United Nations System¹⁶⁴
 - Reports by human rights experts of the special procedures of the Human Rights Council, including the Special Rapporteur on the Human Rights of Migrants¹⁶⁵
 - Concluding observations of treaty-based bodies, including of the Committee on Migrant Workers, on the implementation of the International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families by state parties¹⁶⁶
 - The nongovernmental organization Universal Periodic Review's nongovernmental organization's database on recommendations and voluntary pledges.¹⁶⁷
- c. Perception and opinion surveys, such as:
 - The European Union Agency for Fundamental Rights (FRA) European Union Minorities and Discrimination Survey.¹⁶⁸ In 2008, FRA carried out a largescale survey, interviewing more than 23,500 migrants and ethnic minorities in European Union Member States, covering several topics, including experiences of discrimination, victimization, and police stops. The results

¹⁶¹ http://esa.un.org/unmigration/.

¹⁶² http://www.unhcr.org/pages/4a013eb06.html.

¹⁶³ http://www.oecd.org/migration/mig/databaseonimmigrantsinoecdcountriesdioc.htm.

¹⁶⁴ http://uhri.ohchr.org/en.

¹⁶⁵ For the reports of the Special Rapporteur on the Human Rights of Migrants, see: http://www.ohchr.org/EN/Issues/Migration/SRMigrants/Pages/AnnualReports.aspx.

 $^{^{166}}$ For the concluding observations of the Committee on Migrant Workers, see: http://www.ohchr.org/EN/HRBodies/CMW/Pages/CMWIndex.aspx.

¹⁶⁷ http://www.upr-info.org/database/. All case law issued by the United Nations human rights expert committees, the Treaty Bodies, is available at: http://juris.ohchr.org/.

¹⁶⁸ More information and the survey questionnaire are available at: http://fra.europa.eu/en/survey/2012/eu-midis-european-union-minorities-and-discrimination-survey.

have been presented in a series of reports. FRA has launched the second phase of this survey.

d. Expert judgments, such as

The Migration Integration Policy Index (MIPEX).¹⁶⁹ MIPEX covers integration
policies related to labor market mobility, family reunion, education, political
participation, long-term residence, access to nationality, and anti-discrimination.
The index contains data from European Union Member States, Norway,
Switzerland, Canada, the United States, Australia, Japan, and Serbia.

Disaggregated data are particularly important for measuring discrimination on prohibited grounds, including sex, age, nationality, and migration status.

Standards for Data Collection

Some of the existing standards and guidelines that are available to guide countries in developing relevant data sources include the following:

- The international human rights treaties and the general comments and recommendations adopted by the bodies monitoring their implementation, which provide the legal basis for the development of human rights indicators, as well as practical guidance and common definitions required for the compilation and consolidation of relevant data
- The United Nations Recommendations on Statistics of International Migration (1998) and Principles and Recommendations for Population and Housing Censuses (2008)¹⁷⁰
- Regulation (EC) No 862/2007 of the European Parliament and the Council of the European Union on Community statistics on migration and international protection (2007).¹⁷¹

Data Gaps and Challenges

Despite some positive examples of active data compilation and analysis, most countries still do not undertake the consistent collection and dissemination of data that are relevant for the analysis of the enjoyment of human rights by migrants and their families, notably regarding migrants in an irregular situation.

Most official data systems fail to capture the number of migrants or their level of human rights enjoyment, and much international data on migration does not accurately account for irregular migrants. Some data on migrants in an irregular situation are often available, such as the number of those who are detained or

¹⁶⁹ http://www.mipex.eu/.

¹⁷⁰ http://unstats.un.org/UNSD/Demographic/sconcerns/migration/migr3.htm.

¹⁷¹ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32007R0862.

otherwise subject to state action, such as arrests at border control points, people in immigration detention, and return figures, but these data are rarely indicative of the total irregular migrant population and their human rights circumstances.

It is usually not possible to identify in population censuses (the main statistical sources of information about migrant populations) which migrants are in an irregular situation. A key challenge in data gathering is that migrants in irregular situations are not willing to be included in censuses or registries, for fear of detection and deportation. Migrants in irregular situations are also unlikely to contact local authorities to report the abuses they may be experiencing, or to access public services, such as health and education, for the same fears, or because they lack of information about the rights to which they are entitled.

In this regard, the Committee on Migrant Workers (CMW), which monitors implementation of the International Convention on the Protection of the Rights of All Migrant Workers and their Families, has also expressed concern at the lack of this kind of data, such as on rates of school enrollment. Such a lack of data may, for example, prevent states from assessing and addressing the situation of migrant children effectively.¹⁷²

In addition, the Committee on the Rights of the Child (CRC) has noted that lack of data on children in the context of migration hinders the design, implementation, and monitoring of public policies that protect migrant children's economic and social rights. In relation to migrants in an irregular situation, the committee has recommended that addressing the absence of national figures and estimates on irregular migrants, particularly irregular migrant children, should be made a higher priority by all pertinent duty-bearers, including with regards to:

- Strengthening disaggregated data collection, which includes safeguards preventing the abuse of such data
- Ensuring that households affected by migration are identified in local statistical and data systems, as well as nationally-representative living standards, expenditure, and labor force surveys
- Ensuring that the responsibility for monitoring the situation of migrant children be shared by all countries involved, including transition and destination countries in addition to origin countries.¹⁷³

¹⁷² CMW, Concluding Observations on the report submitted by Algeria, May 10, 2010, United Nations Doc. CMW/C/DZA/CO/1, para. 20.

¹⁷³ See Committee on the Rights of the Child, Report of its 2012 Day of General Discussion on the Rights of All Children in the Context of International Migration, February 2013, paras. 63-67.

Good Practice¹⁷⁴

Boxes 14.1 and 14.2 describe examples of good practice in data collection for the protection of migrants.

BOX 14.1 Analyzing Census Bureau Data to Gather Qualitative Information on Undocumented Migrants in the United States

Research led by the Pew Research Center in the United States, through the Pew Hispanic Center (now called the Pew Research Center's Hispanic Trends Project), provides a statistical portrait of undocumented migrants living in the United States.

The Pew Hispanic Center estimates the stock of undocumented population using a "residual method" (a demographic estimate of the foreign-born population with a regular residence status is subtracted from the total foreign-born population). The statistical findings of the Pew Research Center are based on the Census Bureau's American Community Survey, and feature not only the estimated number, but also detailed characteristics of undocumented migrants living in the United States. The topics covered include age, citizenship, origin, language proficiency, living arrangements, marital status, fertility, schooling, health insurance coverage, earnings, poverty, and employment.

The research also analyzes the work and social conditions faced by undocumented migrant workers, and the findings focus on the situation of undocumented migrant children, and in particular on: school enrollment, estimates of educational attainment, income, poverty rates, and health conditions.^a The recent reports estimate the number of undocumented children in the United States and those born to undocumented migrant parents.^b The Pew Research Center has also published several reports on public opinion about immigration.^c

Census data have also been used to measure the impacts of irregular migration or residence status on human development outcomes, including completion of school education. For example, according to the 2000 Census, only 40 percent of undocumented Latino males between ages 18 and 24 years who arrived in the United States before the age of 16 completed high school or obtained a General Educational Development certificate (a high-school equivalent degree).^d

^{a.} For more information, see J. Passel, D. V. Cohn, "A Portrait of Unauthorized Immigrants in the United States", April 4, 2009, available at: http://www.pewhispanic.org/files/reports/107.pdf.

¹⁷⁴ For more information and other recent practices, see: KNOMAD, OHCHR, UNICEF, ILO, Migrant Forum in Asia, Human Rights Indicators for Migrants and Their Families, 2014.

b. See "Unauthorized Immigrant Population: National and State Trends, 2010," Pew Hispanic Center, February 1, 2011, p. 13, available at: http://www.pewhispanic.org/files/reports/133.pdf. c. See, for example, "Immigration Rises on Washington's Agenda, Not the Public's," Pew Research Center, January 28, 2013, available at: http://www.pewresearch.org/2013/01/28/immigration-rises-on-washingtons-agenda-not-the-publics/, and "Any Court Health Care Decision Unlikely to Please. Immigration: Public Backs AZ Law, But Also Path to Citizenship," Pew Research Center, June 18, 2012, available at: http://www.people-press.org/2012/06/18/any-court-health-care-decision-unlikely-to-please/. d. R. Sabates-Wheeler, "The Impact of Irregular Status on Human Development Outcomes for Migrants," Human Development Research Paper 2009/26, July 2009 c.f. UNICEF, Special Rapporteur on the Human Rights of Migrants François Crépeau, PICUM, National University of Lanús (2013, 34).

BOX 14.2 Revealing Inequalities in Health in Sweden

In Sweden, respondents to the annual survey on living conditions are classified as first-generation migrant, second-generation migrant, or not migrant. The data are disaggregated by migrant status to determine which groups may face discrimination. Analyzing some of the data relating to health outcomes, for example, studies have found higher rates of stillbirth, early neonatal mortality, and pre-natal mortality among women who are registered refugees than women from Sweden. The data also show that migrants are at higher risk of contracting HIV and having chronic hepatitis C.^a

Thus, disaggregated data can reveal inequalities. However, especially when collecting data on health status (and communicable diseases in particular), there are ethical considerations regarding analysis and dissemination, to ensure that discrimination and inequalities are understood and addressed as such, rather than taken out of context to indicate that migrants have poorer health in general, with negative consequences for public health.

a. Philipa Mladovsky, "Migrant Health in the EU," 2007, c.f. University of Essex, 2013, Disaggregated Data and Human Rights: Law, Policy and Practice, The University of Essex Human Rights Centre Clinic, October 2013, p. 31–32.

Key Messages and Recommendations to Address Gaps

Enhance the collection of data to develop evidence-based policies and effectively
monitor the human rights situation of migrants, ensuring that such data are
disaggregated, including on the basis of sex, age, nationality, and migration
status. For instance, states could ensure the inclusion of migrant households
in local statistical and data systems (for example, registers, censuses, and
household surveys), expenditure level of public entities in migration-related
programs, as well as living standards measurement and labor force surveys.

The use of administrative sources should be broadened by compiling and releasing existing data.

- Promote the ethical collection of data. Ensure that international rules on data protection and the right to privacy are scrupulously respected in the collection, storage, use, and dissemination of such data, and that effective firewalls are put in place between public services and immigration authorities to protect migrants from immigration enforcement on the basis on such data. Participation of migrant populations in the design of surveys and other data collection instruments, in the dissemination and analysis of data, will improve the relevance and quality of the statistics.
- Encourage harmonization of data of collection systems to ensure comparability.
- Improve cooperation among different stakeholders, including public services, statistical offices, national human rights institutions, academia, and civil society organizations, especially in developing countries.

Chapter 15

Women

United Nations WOMEN¹⁷⁵

Key Policy Issues

A gender equality and women's empowerment perspective is essential to optimize the development impact of migration. State parties to the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) and the International Labour Organization (ILO) Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families are required by international law to promote equality between women and men by, among other measures, mainstreaming a gender perspective in all areas of policy and planning. Although some states have made efforts to do so, progress continues to be slow.

An overarching policy issue that is relevant to all migrant women is the need for protection against gender discrimination in all phases of the migration process, to ensure women's equal opportunity to participate in and benefit from labor migration. Yet, gender stereotypes continue to influence the ways women are considered in relation to migration and development: specifically, women are frequently seen as vulnerable dependents or potential victims in need of protection, rather than as migrant workers contributing to the development of countries of origin and destination alike. This misperception is reinforced by migration policies that assume male migrants are breadwinners and female migrants are dependent family members, a model that no longer reflects reality, given the trend of feminization of migration in most corridors worldwide. 176 Sex-disaggregated data are required to challenge such stereotypes and create a more accurate and nuanced understanding of the gender dimensions of migration. Sex-disaggregated data refers to data that provide information separately on females and males in the population or group of interest, and that therefore enable the situations of females and males to be compared to reveal differences and inequalities.

¹⁷⁵ This chapter was prepared by Sarah Gammage, United Nations WOMEN

¹⁷⁶ See Pérez Orozco, Amaia, Denise Paiewonsky and Mar García Domínguez, 2008, Crossing Borders II: Migration and Development from a Gender Perspective, United Nations INSTRAW (now part of UN WOMEN), Santo Domingo, Dominican Republic.

Care must be taken to avoid characterizing migrant women workers generically as a vulnerable group, and instead focus on identifying specific inequalities and contexts that may place certain subgroups of migrants in a disproportionately vulnerable position and, therefore, in need of protection. Key policy questions for which data and evidence are needed to enhance the protection of migrant women¹⁷⁷ include, but are not limited to:

- Women migrant workers' labor rights, especially in sectors lacking adequate legal protections, such as domestic work, sex work, or entertainment-related services
- Gender-based violence against migrant women throughout the migration cycle (in transit and in situ), in public, at work, and at home
- Gender differences in access to regular migration channels, which may lead greater numbers of women than men to become undocumented, migrate irregularly, and/or risk being trafficked
- Migrant women's access to social protection, including health services, particularly in destination and transit countries.

Data Needed to Analyze the Topic

To address the overarching issue of eliminating gender discrimination in migration processes, sex-disaggregated data must be collected at all levels of analysis. Sex-disaggregated data provide a starting point for in-depth analysis of subgroups such as women and men migrants in a particular country or labor sector, or women and men undocumented migrants. For example, data on migrants' labor force participation disaggregated by sex may reveal trends whereby women are channeled into certain precarious sectors, which have specific protection needs.

One major impediment is the lack of sex-disaggregated and gender-responsive data reflecting the specific situations, differences, and needs of male and female migrants. To this end, CEDAW General Recommendation No. 26 on women migrant workers 178 recommends that state parties that are countries of origin and destination "conduct and support quantitative and qualitative research, data collection and analysis to identify the problems and needs faced by women migrant workers in every phase of the migration process in order to promote the rights of women migrant workers and formulate relevant policies," as per CEDAW article 3.

¹⁷⁷ Included among the recommendations of the 2013 United Nations General Assembly "High-Level Dialogue on International Migration and Development" was the need to protect female migrants from gender-based discrimination and violence at each stage of the migration process and at the workplace. 178 In addition to No. 26, earlier CEDAW general recommendations are also relevant to data collection on migrant women, including general recommendation No. 9 on the gathering of statistical data on the situation of women, No. 12 on violence against women, No. 13 on equal remuneration for work of equal value, No. 15 on the avoidance of discrimination against women in national strategies for the prevention and control of acquired immunodeficiency syndrome (AIDS), No. 19 on violence against women, and No. 24 on women's access to health care, as well as the concluding comments made by the committee when examining the reports of states parties.

Women migrant workers' labor rights. Data are needed on migrant women workers' participation in the formal and informal economy, including sectors such as paid domestic work and entertainment-related services. The data that are needed include not only how many, but also measures of working conditions, such as hours, pay, access to health insurance and social security, and so forth. Data on migrant women's interactions with labor recruiters, such as fees paid, are also of vital importance.

Gender-based violence against migrant women. Data are needed on the prevalence of domestic or intimate partner violence, disaggregated by sex, age, nationality, country of birth, and migrant status, with corresponding information on the perpetrator, form of violence, and access to justice. Since violence may take place in public spaces and workplaces (formal and informal) as well, data collected on these types of violence should be disaggregated by sex and nationality to apprehend such incidents. Finally, data are needed on harmful practices linked to the assertion of cultural identity that may be perpetuated in certain migrant communities, such as dowry-related violence, female genital mutilation, early and forced marriage, as well as what are often termed "honor" crimes.¹⁷⁹ Trafficking is a form of violence against women that affects many migrant women and girls, and for which specific data are needed; this topic is addressed in chapter 17, on Trafficking in Persons.

Gender differences in access to regular migration channels. To assess whether there are gender differences, and then, whether these derive from direct or indirect gender discrimination in migration policies and schemes, data are needed on the sex composition of the population group(s), representation of male and female migrants in labor market sectors, number and percentage of recruited male and female migrant workers, visas issued to men and women by category, and numbers of undocumented migrant men and women (for example, those benefiting from regularization schemes, if any).

Migrant women's access to social protection. Indicators of social security reflect the primary elements that make up the social protection floor, as outlined by the United Nations Chief Executive Board: health care, education, housing, water and sanitation, pensions, and employment insurance. Sex-disaggregated data are particularly needed for migrant workers in temporary labor migration schemes and the informal sector, in transit and destination countries, where important protection gaps may exist. The types of data may respond to criteria established by the

¹⁷⁹ See United Nations Special Rapporteur on Violence against Women, Its Causes and Consequences. 2007. Intersections between Culture and Violence against Women. http://www2.ohchr.org/english/bodies/chr/special/sp_reportshrc_4th.htm.

¹⁸⁰ ILO and World Health Organization. 2009. The Social Protection Floor: A Joint Crisis Initiative of the UN Chief's Executive Board for Co-ordination on the Social Protection Floor. Geneva: International Labour Office. Available at: http://www.un.org/ga/second/64/socialprotection.pdf.

¹⁸¹ See, for example, Hennebry, Jenna. 2014. "Falling through the Cracks? Migrant Workers and the Global Social Protection Floor," Global Social Policy, http://gsp.sagepub.com/content/early/2014/08/14/1468018114544765 and ILO. 2013. Social Protection for Migrant Workers. Geneva:

United Nations for evaluating access to public goods; ¹⁸² considering, for example, the extent to which individuals are entitled (on paper) to social security schemes and essential services, including eligibility criteria; the degree to which they are accessible (in practice); as well as democratic mechanisms that enable participation in determining the form of such protections (for example voting or consultation). ¹⁸³ Particular attention should be paid to labor sectors where women migrant workers are concentrated, such as domestic work ¹⁸⁴ and other services.

Existing Sources and Standards for Data Collection

The data sources that may be used to analyze the topic of protection of migrant women largely overlap with those identified in chapter 14, on the Human Rights of Migrants. To the extent possible, these data should be disaggregated by sex as well as age, nationality, and migration status. In addition to the international human rights monitoring mechanisms in the preceding section, data sources specific to the protection of migrant women may include the concluding observations of the CEDAW committee¹⁸⁵ and reports of the special rapporteur on violence against women.

Global data sources that can provide some of the information on women migrants and their potential and actual vulnerabilities in different spheres in the household, workplace, and community include the following: global data sources, such as ILOSTATS, Key Indicators of the Labour Market (ILO), World Development Indicators data, and World Health Organization (WHO) data; social protection data gaps with respect to migrants; regional data sources (for example, from the European Union or the Organisation for Economic Co-operation and Development), which compile aggregated data from household surveys and censuses; and national data sources from government and civil society (for example, national labor inspection databases, household and employment surveys, micro data sets, census data, data from workers unions, and so forth).

See, for example, Nautilus Institute for Security and Sustainability. 2002. Global Public Goods. Available at: http://nautilus.org/gps/applied-gps/global-public-goods/#axzz2rkDWwzO0, and Thoyer, Sophie. 2004.
 Global Public Goods. Policy Brief Paper: Trade, Societies and Sustainable Development SUSTRA Network.
 Available at: http://www.agro-montpellier.fr/sustra/publications/policy_briefs/policy-brief-GPG-eng.pdf.
 See Hennebry (2014).

¹⁸⁴ See United Nations Women and International Trade Union Confederation. 2013. "Domestic Workers Count Too: Implementing Protections for Domestic Workers". Available at: http://asiapacific.unwomen.org/en/publications/2013/3/domestic-workers-count-too-implementing-social-protections-for-domestic-workers#sthash.s2wMLrw8.nwtkgyVg.dpuf.

¹⁸⁵ See, for example, Committee on the Elimination of Discrimination against Women. 2013. Concluding observations on the combined sixth and seventh periodic reports of the Dominican Republic, available at http://tbinternet.ohchr.org/_layouts/treatybodyexternal/Download.aspx?symbolno=CEDAW/C/DOM/CO/6-7&. These include explicit references to multiple forms of discrimination against Haitian migrant women and women and girls of Haitian descent regarding their right to education, health, nationality, stereotypes, trafficking, and sexual exploitation.

In terms of the four priority areas for protection of migrant women, examples of specific data sources and existing standards and guidelines include the following:

Women migrant workers' labor rights. Labor data from inspections, labor force surveys, nongovernmental organization (NGO) reports, union reports, and dedicated special surveys are often needed to collect data on respect for, or violations of, labor rights in sectors with high concentrations of women migrant workers, such as domestic work or entertainment-related services. Qualitative data and documentation on legal cases, and challenges, grievances, and so forth, may be available through such sources. Data on prostitution or sex work, which is generally not covered in labor force statistics, can be collected through special surveys focusing on protection-related measures, such as safety, access to health services, work site conditions, and freedom from abuse.

Gender-based violence against migrant women. At the national level, data can be compiled from crime and judicial statistics, immigration records, labor inspection records, victim support services, and surveys. At the international level, data sources on gender-based violence can be found through United Nations Population Fund, United Nations Children's Fund, WHO, and Demographic and Health Surveys. Documents and guidelines for producing statistics on violence against women include the following:

- United Nations Department of Economic and Social Affairs (UN DESA), "Guidelines for Producing Statistics on Violence Against Women" 186
- UN Special Rapporteur on Violence against Women "The Next Step: Developing Transnational Indicators on Violence Against Women" 187
- Economic Commission for Latin America and the Caribbean, "Data Collection System for Domestic Violence." 188

These and other guidelines focus mainly on nationally representative, population-based surveys, but also recommend a process of triangulation using a variety of sources, including data from services, to build a composite picture of violence against women.

Gender differences in access to regular migration channels. Official statistics produced by origin and destination countries on outflows/inflows of migrant workers and transitions from temporary to permanent status by sex, country of origin, skill level, age, and so forth are a starting point. Administrative sources for monitoring

United Nations DESA. 2013. Guidelines for Producing Statistics on Violence against Women: Statistical Surveys. Available at: http://unstats.un.org/uns/dgender/docs/Guidelines_Statistics_VAW.pdf.
 United Nations Special Rapporteur on Violence against Women, Its Causes and Consequences, Yakin
 The New State Developing Towards and Consequences, AVIDEC/1/4/

Ertürk. 2008. "The Next Step: Developing Transnational Indicators on Violence Against Women". A/HRC/7/6/Add.5. Available at: http://www2.ohchr.org/english/bodies/hrcouncil/docs/7session/A.HRC.7.6.Add.5.pdf.

188 Economic Commission for Latin America and the Caribbean. 2002. Data Collection System for Domestic Violence. http://www.cepal.org/mujer/noticias/noticias/7/14217/lccarg691i.pdf.

women and men's participation in regular migration channels may include the following:

- New entry or immigration visas (visa applications, visas granted, or newly activated visas) by visa type
- New exit or emigration visas (visa applications, visas granted, or newly activated visas)
- New permission to work in the country (work permits)
- New reports to population registers (where they exist)
- New permission to work abroad (where they exist).

The Organization for Security and Cooperation in Europe has developed a "Guide on Gender-Sensitive Labour Migration Policies," which includes guidance for producing gender-related data, conducting gender impact assessments, and developing indicators for gender-sensitive labor migration policies for countries of origin and destination. ¹⁸⁹

Migrant women's access to social protection. Examples of national-level administrative data sources include the following:

- New members of special insurance schemes (for citizens abroad, where they exist)
- Other social insurance, protection, or service registration data (for example, new social insurance numbers)
- New reports to tax or social security agencies (for example, income tax records, out-of-country pension claims, and so forth).

Other sources of data are

- Provincial, regional, or municipal data on the use of social service, housing and workplace inspections, health care facility usage, hospital/emergency room intake data, patient logs, public health reporting and disease control, coroners' inquests into deaths of migrant workers, and so forth.
- Micro-data sets and registries kept by NGOs, civil society organizations, and migrant worker support organizations (needs assessments by sector, number of clients served, resources spent on supporting workers, assistance with filing tax claims, number of successful benefit claims, and so forth).

The ILO has compiled a plethora of statistical resources on its Social Protection page, including global databases, household surveys, statistics and indicators,

¹⁸⁹ Organization for Security and Cooperation in Europe. 2009. Guide on Gender-Sensitive Labour Migration Policies. Available at: http://www.osce.org/secretariat/37228?download=true.

and other methodological tools. ¹⁹⁰ Ratel, Williams, and Williams (2013) initiated an evaluative framework of migrants' access to social protection by status groups. ¹⁹¹

Data Gaps and Challenges

Among the key challenges is that sex is routinely not included in migration data, particularly at the aggregate and global level (for example, the World Bank Migration Database). Data that are not disaggregated by sex and migrant status may inadvertently conceal exclusion and inequalities, making it difficult to measure progress and dismantle entrenched patterns of discrimination against migrant women.

Data gaps on women's migration may be attributable to several challenges. The invisibility of women's labor in domestic work or the informal sector; restrictions on their right to work; predominance of women migrating as "dependent spouses," which may mask limitations on their access to regular migration schemes; and involvement in activities that may be deemed criminal offences or against the public order (such as sex work) mean that a higher proportion of women are statistically invisible and undocumented. 192 The movements of undocumented migrants, a majority of whom are likely to be women, 193 are not recorded in official sources, and the migrants avoid contact with authorities for fear of arrest and deportation. Data on the many women migrant workers, particularly domestic workers, ¹⁹⁴ who are also isolated by their places of work and working conditions, are also unlikely to be captured by conventional surveys. Statistics for measuring violence against migrant women are not compiled in a comprehensive or regular manner by most origin, transit, and destination countries. 195 Data on migrant women's access to social protection can at best be patched together through sources as disparate as the coverage provided to them.

ILO. Social Protection. http://www.social-protection.org/gimi/gess/ShowTheme.action?th.themeId=10.
 Ratel M-H, Williams K and Williams G. 2013. Inserting Migrants into the Global Social Protection Floor.
 Centre for International Governance Innovation Junior Fellow Policy Brief Series, no.11. Available at: http://www.cigionline.org/sites/default/files/no11_0.pdf.

¹⁹² Abramovich, Victor et al. 2011. The Rights of Children, Youth and Women in the Context of Migration: Conceptual Basis and Principles for Effective Policies with a Human Rights and Gender Based Approach. UNICEF Social and Economic Policy Working Paper. Available at: http://www.globalmigrationgroup.org/sites/default/files/uploads/gmg-topics/human-rights/The-Rights-of-Children-Youth-and-Women-in-the-Context-of-Migration.pdf.

¹⁹³ Petrozziello, A. 2013. Gender on the Move: Working on the Migration-Development Nexus from a Gender Perspective. UN Women: Santo Domingo.

¹⁹⁴ Lack of data contributes to a policy vacuum regarding women migrant domestic workers in many countries. Without the statistics needed for an evidence-based case, it is difficult to argue that they are a significant workforce in need of protection. ILO has estimated that there are 53 million to 100 million domestic workers worldwide, but such estimates do not provide the specificity or detail required by policy makers. The 2011 Global Forum on Migration and Development identified the absence of sex-disaggregated data on migration flows, stocks, and remittances as a major reason for the neglect of domestic workers by policy makers. ILO Convention 189 on Decent Work for Domestic Workers recommends that state parties collect the data necessary to support effective policy making on domestic work (recommendation 201, Article 25).

¹⁹⁵ Shah, N. and I. Menon. "Violence Against Women Migrant Workers: Issues, Data and Partial Solutions," Asian and Pacific Migration Journal, 6(1): 5–30.

BOX 15.1 Technical Challenges to the Collection of Sex-Disaggregated Migration Data

- Countries of origin rely on countries of destination for data on migrants
 after emigration. Cooperation is essential for consistency in recording a move as emigration from the first and immigration into the
 second. Difficulties arise when only one of the parties can provide
 sex-disaggregated data.
- Gender-blind methods of collection create gender bias in the ways in which women migrants are classified. Formats and methods of collection are often not comparable across states.
- Within states, data on migration are dispersed among many agencies and sources, each with different definitions of key variables. Some sources may be disaggregated by sex while others are not.
- Administrative data from immigration offices include short-term visitors, business travelers, and tourists. Migration status cannot be reliably determined on entry. Gender stereotypes may lead to men being classified as migrants and women as dependents.
- Many border crossings between countries sharing land or river boundaries are unrecorded, thereby excluding local migration flows, including some dominated by women.
- Data held by Immigration and Customs, which are primarily interested in implementation of laws, are often not compiled in sex-disaggregated format. The data may also be held in paper files rather than electronic formats.

Failure to recognize the different situations of migrant women compromises the validity of many current migration indicators and their use to monitor the achievement of desired migration and development outcomes. ¹⁹⁶ The technical challenges to the collection of sex-disaggregated migration data are summarized in box 15.1.

Key Messages and Recommendations to Address Gaps

Ensure that sex is included as a variable in the study design, and data are
presented in disaggregated fashion at all levels of analysis. Improve the
collection, dissemination, and analysis of sex—and age-disaggregated data and

¹⁹⁶ Global Migration Group. 2010. Mainstreaming Migration into Development Planning. A Handbook for Policy-Makers and Practitioners. International Organization for Migration, p. 39.

information, to assist in the formulation of migration and labor policies that are gender-sensitive and protect migrant women's human rights, as per resolution 66/128, article 19.¹⁹⁷ Surveys and questionnaires should also include questions about the "intention to work" or "work status" explicitly in data collection, so that women who are not in traditional worker statuses are also counted.

- Triangulate among various data sources to overcome data gaps. No single source can or will capture the multiple dimensions of the vulnerabilities that migrant women face in their homes, on the move, and in the workplace. For example, the United Nations DESA guidelines on producing statistics on violence against women recommend a process of triangulation, using a variety of sources, including data from services, to build a composite picture of violence against women, which can and should be disaggregated by national origin.
- Collect specific data on violence against women migrant workers. As indicated
 in the 2009 Report of the Secretary-General, specific data on violence against
 women migrant workers are needed, including on the different forms of
 violence, perpetrators, and context in which the violence takes place, be it the
 home, workplace, or detention facility. Such data would facilitate in developing
 national policies and programs, monitoring their impact, and assessing progress
 in addressing violence against women migrant workers. Data collection and
 analysis should therefore be accelerated and qualitative research intensified
 to facilitate improved understanding and more effective responses to violence
 against women migrant workers.
- Be creative; identify new potential data sources targeting protection gaps for migrant women in transit and destination countries. Use qualitative and quantitative data. Take specific measures through, for example, special data collection surveys, paying particular attention to domestic workers, undocumented women migrants, and women migrant workers in the sex and entertainment sectors.

¹⁹⁷ Resolution adopted by the General Assembly on December 19, 2011, Violence Against Women Migrant Workers, A/RES/66/128, article 19.

Chapter 16

Migrant Girls

United Nations Population Fund¹⁹⁸

Key Policy Issues

One of the most significant changes in migration patterns in the past half century has been that more women are migrating than ever before. Today, women and girls are increasingly migrating on their own, not necessarily to accompany husbands or other family members. Females constitute almost half of the international migrant population, and in some countries, as much as 70 or 80 percent. Female migrants are slightly more numerous than male migrants in developed countries. In developing countries, however, female migrants total slightly less than 45 percent of all migrants.

Only 15 percent of all international migrants are younger than age 20 years, compared with 35 percent of the total population. This difference is because most migrants move when they are between ages 20 and 34 years. Further, in many countries, children born to migrants in the countries of destination are not considered international migrants.

Among young migrants younger than age 20 years, male migrants outnumber female migrants globally, with 90 female migrants for every 100 male migrants in this age group. (Regional differences exist.)¹⁹⁹

Despite the increase in female migration, the phenomenon, particularly of migrating girls, is still largely misunderstood, and is not adequately addressed in migration policies. Policy makers have yet to acknowledge the particular challenges and risks faced by migrating girls and bring their issues to the forefront of the migration and development agenda. The major issues that need to be addressed with appropriate policies and programs include protection of the human rights of migrant girls, and equal access to education, decent employment, and health, legal, and social services.

The migration of girls has tremendous potential. It can have an empowering effect for girls, positively influencing gender equality by opening new opportunities and

¹⁹⁸ This chapter was prepared by Ann Pawliczko and Sabrina Juran UNFPA.

¹⁹⁹ United Nations Population Division: Facts and Figures: International Migrant Children and Adolescents.

a chance for greater independence and self-confidence. Migration can be a vehicle for enhancing the status of girls. Migration can permit girls to escape conflict, personal violence, discrimination, cultural restrictions, or oppressive gender roles.

Migration can offer better educational opportunities and access to health care, including reproductive health, for girls. The migratory experience can also provide new economic opportunities, increased financial independence, and decision-making power.

But the migration of girls can also pose significant challenges. Migrant girls are particularly vulnerable because they experience a double jeopardy—they are young and female. They typically have less access to information about and fewer opportunities for migrating legally, and often have less preparation than their male counterparts to cope with conditions en route and in the countries of destination. Few migrant girls know their rights, and even fewer will demand them. In short, the migration experience for females differs from that of males from the moment they decide to migrate. Moreover, migration of girls can involve a significant amount of tension, especially since it often breaks through established values and practices.

Education and skills enhancement opportunities for girls are typically more limited in sending countries, which means that migrant girls are more likely to find themselves in the lowest-paid and least attractive jobs. As migrant girls frequently end up in low-status, low-wage production and service jobs, and often work in gender-segregated and unregulated sectors of the economy, such as domestic work, they are exposed to a much higher risk of exploitation, violence, and abuse. Migrant girls are particularly vulnerable to human trafficking for the purposes of sexual exploitation, a multimillion-dollar business. Traffickers often use violence to make girls do what they want, suppress any attempts to escape or seek help from law enforcement, and intimidate other victims. Trafficked girls are more exposed to sexual violence and sexually transmitted infections, including HIV, yet they often have little access to or are afraid to seek medical treatment, including reproductive health care or legal services. Many are deprived of food and water, locked up for days, and severely beaten or raped. The trafficking experience often involves unwanted pregnancy as well as forced abortion.

A particular challenge for migrant girls is access to appropriate and affordable health care services. Short—and long-term health risks challenge the well-being of many young migrants, who are particularly vulnerable to abuse, violence, and exploitation. Many migrant girls do not access health and social services because of high costs or language or cultural barriers. Many lack information about entitlements. Those who are in an irregular situation may be afraid to seek health care information and services because of fear of deportation. As a result, untreated minor conditions may worsen into serious illness. Of particular concern are the many girls who fall prey to traffickers and are afraid to seek medical treatment, including reproductive health care. As a result, migrant girls are often disproportionately affected by reproductive ill health.

The practice of arranged marriages is not uncommon in certain migrant communities. Arranged or forced marriages can be a major source of psychosocial suffering for girls who grow up seeing their non-migrant peers experiencing very different lifestyles. In the case of high suicide rates among female adolescent migrants, fear of arranged or forced marriage might be an important factor.

To protect the human rights of migrant girls throughout the entire migration process, it is essential to consider migration from a lifecycle approach, examining the situation of girls before they migrate, as they migrate, their situation abroad, and upon return to the country of origin.

Although girls continue to migrate, little information and reliable data are available to measure the extent of the phenomenon. Several human rights instruments exist to protect the rights of migrants, but they are not uniformly implemented everywhere. There is an urgent need for data and research that would shed light on the situation and protection of migrant girls, to address their specific needs in the context of migration. The impact of migration on girls must been considered in the broader context of poverty and conflict, and within the perspectives of vulnerability and resilience, gender relations, and children's rights.

Data Needed to Analyze the Topic

There is a dearth of information on the migration of girls and its impact on development. Girls' migration patterns have not been systematically quantified, and important evidence gaps remain.

For many countries, the population and housing census is the only suitable data source that can yield information on the volume and characteristics of international migrant girls, that is, girls who were born in a country different from where they were enumerated (the foreign-born) or those who are citizens of a country different from the one in which they were enumerated (foreign citizens). In some countries, the census provides information on the number of immigrants who arrived during the past one, five, or ten years, which allows for analysis of recent immigration. However, more research is needed that can reflect the diversity of migrant girls' experiences.

Data from censuses and surveys, such as Demographic and Health Surveys and the United Nations Children's Fund's (UNICEF's) Multiple Indicator Cluster Surveys, could provide information on subpopulations of migrant girls, the greatest risk they face, and where the most vulnerable migrant girls reside.

Longitudinal surveys are very rare, but they are needed to conduct research on the implications of migration for girls' social, economic, and health outcomes. Evaluations of policies and programs could yield important information on their impact by migrant age, origin, and timing of move, as well as the sustainability of benefits over time.

The analysis should include data (levels, trends, and characteristics) on migrant girls, and give due attention to key variables that affect the integration of migrants and thus their potential contribution to development, including their legal status, country of origin, reasons for migrating, duration of stay, period of arrival, and so forth.

Not all the effects of migration of girls on development can be demonstrated easily, and there are methodological difficulties. For example, in the case of the information on remittances, found in household surveys, the analysis has to be mindful that remittances are normally underreported and the analysis of volume by poverty levels can be affected by the fact that the households that benefit most from remittances tend to emerge from poverty. Oftentimes, the data do not specifically tie remittances to the receiver or provide information on the distribution of remittances among household members. Moreover, data on remittances are not always disaggregated by the age and sex of the remitter or the person receiving the remittances in the country of origin. As a result, it is difficult to quantify the impact of girls' remittances on development.

Existing Sources and Standards for Data Collection

Primary Data Sources

- Population and housing censuses and population registers, national administrative sources, and Demographic and Health Surveys
- UNICEF's Multiple Indicator Cluster Surveys
- Labor force surveys and other specialized surveys
- Various household surveys of the Living Standards Measurement Study type (poverty and social indicator monitoring), which contain information about remittances at the household level, by characteristics of the recipients (sex, age, and so forth), which can be analyzed by poverty strata (subject to the restrictions)
- Special migration surveys (for example, the Mexican Migration Project, Guatemala 2003, and Colombia 2005)
- Central banks and central statistical offices (in some countries): national accounts
 provide information about international remittances (aggregate figures), but
 these are underestimated because they do not capture money and goods that
 migrants carry with them
- National accounts for remittances (aggregate figures); however, they do not provide information on the characteristics of the receiver.

Secondary Data Sources

- United Nations Population Division: Wall Chart: The Age and Sex of Migrants 2011
- United Nations Population Division: Facts and Figures: International Migrant Children and Adolescents (0–19 years)
- United Nations Population Division: Trends in International Migrant Stock
- United Nations Population Division: International Migration Flows to and from Selected Countries, United Nations Population Division, United Nations Global Migration Database to analyze the distribution by country of origin (for immigrants) and by country of destination (for emigrants), and to identify the five most common countries of origin and destination; use information on country of citizenship and country of birth; prepare cross-tabulations of by age and sex
- University of Sussex, Development Research Center on Migration, Globalization and Poverty: Global Migrant Origin Database
- United Nations Economic and Social Commission for Asia and the Pacific online database, available at: http://www.unescap.org/stat/data/swweb/DataExplorer.aspx
- Eurostat Regional Migration Statistics: http://epp.eurostat.ec.europa.eu/portal/page/portal/region_cities/regional_statistics/data/database
- Eurostat International Migration Flows: http://epp.eurostat.ec.europa.eu/portal/page/portal/population/data/database
- Economic Commission for Latin America and the Caribbean / Latin American and Caribbean Demographic Centre International Migration in Latin America—IMILA: http://www.eclac.cl/migracion/imila/
- African Development Bank and World Bank Africa Migration Project: http://econ. worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTDECPROSPECTS/0,,content MDK:21681739~pagePK:64165401~piPK:64165026~theSitePK:476883,00.html
- http://econ.worldbank.org/external/default/main?pagePK=64165401&theSite PK=476883&contentMDK=22617025&noSURL=Y&piPK=64165026
- World Bank Monthly Remittance Data: http://www.worldbank.org/prospects/migrationandremittances
- World Bank Global Development Finance
- International Monetary Fund World Economic Outlook
- World Bank Migration and Remittances Factbook: http://www.worldbank.org/publications
- World Bank South-South Migration and Remittances: http://siteresources.worldbank.org/INTPROSPECTS/Resources/334934-1110315015165/SouthSouth MigrationandRemittances.pdf

Data Gaps and Challenges

There is a need for better data on the flows of migrant girls, and more research on the impact of migration on the social, economic, and health outcomes for girls.

There are better data in some countries, especially countries with a long migration tradition, such as Mexico (censuses; household surveys; sectoral surveys addressing such issues as health, education, and social protection; and needs assessments). For example, the Mexican Migration Project (MMP) was created in 1982 by an interdisciplinary team of researchers to further understanding of the complex process of Mexican migration to the United States. The main focus of the MMP has been to gather social and economic information on Mexican-U.S. migrant populations. The data collected have been compiled in a comprehensive database that is available to the public free of charge for research and educational purposes. The MMP is a unique source of data that enables researchers to track patterns and processes of contemporary Mexican immigration to the United States.

Good Practice

The 2008 publication, "Girls Count: A Global Investment and Action Agenda," laid out the case for investing in girls, and outlined actions that policy makers, donors, the private sector, and development professionals can and should take to improve the prospects for girls' well-being in the developing world, among them, migrant girls: http://www.cgdev.org/sites/default/files/15154_file_GC_2009_Final_web_0.pdf.

The Population Council's 2013 publication, "Girls on the Move: Adolescent Girls and Migration in the Developing World," illuminates girls' migration to urban areas in pursuit of work, education, and social opportunities unavailable to them in rural areas. The publication further calls for filling critical evidence gaps on adolescent girls' migration: http://www.popcouncil.org/uploads/pdfs/2013PGY_GirlsOnTheMove.pdf.

United Nations Population Fund's (UNFPA's) Population Situation Analysis guides users through the links between migration and the spatial distribution of poverty at the macro level of analysis, also looking at migrant subpopulations like adolescent girls. The analysis looks at the positive aggregate effects of international migration on the balance of payments and development financing, the positive effects of remittances at the household level, and the negative effects of international migration through mechanisms such as the brain drain.

www.unfpa.org/psa.

Key Messages and Recommendations to Address Gaps

International migration and development policies must be designed and implemented with a human rights and gender perspective. Respecting and protecting the human rights of migrants, in particular girls, enables them to contribute more fully to development and share in its benefits. Such policies must also be gender-sensitive, since women and girl migrants are especially vulnerable to human rights abuses, exploitation, and discrimination. Female migrants, especially young women, are more vulnerable to trafficking and smuggling and need protection. Many female migrants lack access to much-needed health services, legal services, and basic social services. It is essential to protect the human rights of female migrants throughout the entire migration process and to consider female migration from a life-course perspective, examining the situation of women and girls before they migrate, as they migrate, their situation abroad, and upon return to the country of origin.

To reap the full development benefits of girls' migration, policies must be comprehensive and inclusive, and must be based on the principles of nondiscrimination, empowerment, and participation. Recommendations:

- Build the capacity of countries to gather, analyze, and utilize data for policy
 formulation and program planning, to ensure the protection of migrant girls
 and support data collection efforts. Data of all types, from health and education
 statistics to the counts of program beneficiaries, need to be disaggregated
 by age and sex to make migrant girls more visible to policy makers and reveal
 where girls are excluded.
- Support research to fill evidence gaps. Operational research is needed that fosters increased understanding of the migration processes of girls and addresses their needs, particularly sexual and reproductive health needs, as well as studies that focus on the relationship between migration and development; the root causes of migration; young people and the gender dimension of migration in a lifecycle approach; the impact of migration on gender equality and women's empowerment; labor migration in a globalized economy; the impact of remittances; the role of the diaspora; measures to prevent human trafficking, especially of women and girls; ensuring the human rights of migration on the environment.
- Engage diaspora organizations to help fill evidence gaps and promote migrant girls' access to education, health, employment, and social and legal services.
- Promote South-South cooperation and collaboration to ensure equal opportunities for girls to migrate legally and protection of human rights during the migration process and in the country of destination.
- Encourage pre-departure training and tailored "arrival" training for migrant girls to make them aware of their rights.

- Encourage consulates abroad to gather information on migrant girls in the diaspora and assist in the protection of their rights.
- Include migrant girls in discussions on issues that affect them.
- Include the issues of migrant girls' health, rights, and empowerment in dialogues aimed at advancing development.

Chapter 17

Trafficking in Persons

United Nations Office on Drugs and Crime)200

Key Policy Issues

Trafficking in persons²⁰¹ is conceptually distinct from people smuggling.²⁰² Trafficking is strongly connected with migration and development, and many trafficking flows are from poor areas toward more affluent ones. Both activities are, by their nature, difficult to measure. However, there are significant differences in patterns and characteristics between the experiences of adults and those of children, and according to socioeconomic and historical contexts. For some adult victims, the trafficking route starts as a migration process, when they are recruited with false promises and then subsequently used in exploitative practices in a continuum of constructed vulnerability. The patterns and characteristics of child trafficking are very different. Vulnerability to trafficking is often related to poverty, unemployment, inequality, discrimination, gender, being a child, and many other situations that have a link to development.²⁰³ It is also the case that many people who are trafficked then find themselves criminalized. Some states, such as European Union Member States, have the legal option to protect trafficked people from prosecution in recognition of the fact that the route to becoming, or being defined as, an "offender" might be connected to the same vulnerabilities that facilitate victimization.²⁰⁴

²⁰⁰ This chapter was prepared by Katharina Peschke and Kristiina Kangaspunta, UNODC. Textbox 17.1, on IOM's Global Human Trafficking Database, was provided by Harry Cook, IOM's Migrant Assistance Division (MAD), Department of Migration Management (DMM)

²⁰¹ "The EU has now adopted a broader definition of what should be considered trafficking in human beings than that under Framework Decision 2002/629/JHA, to include additional forms of exploitation. Within the context of this directive, forced begging should be understood as a form of forced labor or services, as defined in the 1930 ILO Convention No 29 concerning Forced or Compulsory Labor." Directive 2011/36/EU of the European Parliament and the Council of April 5, 2011, on preventing and combating trafficking in human beings and protecting its victims, and replacing Council Framework Decision 2002/629/JHA.

²⁰² According to the United Nations Convention on Transnational Organized Crime and its protocol against the smuggling of migrants, people smuggling is "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 of which the person is not a national or a permanent resident."

²⁰³ See UNODC Global Report on Trafficking in Persons, 2012, p. 44.

 $^{^{204}\,}$ There is also a useful report by the Working Group on Trafficking in Persons on non-prosecution: CROC/COP/W94/2010/4.

Trafficking in persons also has a clear impact on development at different levels, not least child development and the challenges and ordeals of being separated from families and community (contrary to the United Nations Committee on the Rights of the Child and the aim that nobody should be left behind). At the individual level, in addition to serious physical and mental impacts, victims lose their expected income, and they may suffer from social exclusion and marginalization, not only in the destination country, but also after returning to their country of origin. The economic impact of human trafficking includes the redirection of the profits from legitimate employers to the criminals, as well as reductions in revenue, since trafficking generates no tax revenues, and it can be linked to tax evasion and money laundering. In addition, trafficking results in a loss of migrant remittances when victims are not paid salaries. There is also an economic impact of depriving trafficked children of education and training for future legal economic activity.

Trafficking in persons can also have an impact on the rule of law when it has links to corruption and other crimes, which can reduce the accountability of authorities and the possibility of impartial policy making. In addition, human trafficking may have links to organized crime in the private and public sectors, which not only has significant human rights, economic, social, and political impacts, but also endangers human as well as national security.²⁰⁵ (The Council of Europe Convention provides for compensation to victims.)

Development is also connected to the responses to trafficking in persons. Lack of national structures, such as the National Referral Mechanism, provided for in the Council of Europe Convention on Action against Trafficking in Human Beings, to address trafficking in persons, has an impact on national and international coordination capacities. Lack of resources to support and protect victims has an impact on the rights of the victims. In the same way, lack of adequate criminal justice resources prevents the detection of trafficking cases, as well as efficient prosecution and punishment of offenders, although most countries have criminalized trafficking in persons. The lack of provision of protective status for victims and special measures for vulnerable witnesses also has an adverse effect on prosecutions, as witnesses are not prepared to cooperate.

Article 8 of the European Union Anti-trafficking Directive, which states that Member States, in accordance with the basic principles of their legal systems, take the necessary measures that ensure that competent national authorities are entitled not to prosecute or impose penalties on victims of trafficking in human beings for their involvement in criminal activities that they have been compelled to commit as a direct consequence of being subjected to any of the acts referred to in Article 2—victims should not be equated with criminality in these circumstances. The Council of Europe and Groupe de Recherche en Economie Théorique et Appliquée GRETA have published guidance on this. See also the Organization for Security and Cooperation in Europe's policy and legislative recommendations toward the effective implementation of the non-punishment provision with regard to victims of trafficking, 2013.

²⁰⁵ See UNODC, Global Report on Trafficking in Persons, 2014, p. 43.

Despite the internationally accepted legal definition of human trafficking established in the United Nations' Protocol against Trafficking in Persons, ²⁰⁶ in practice a variety of interpretations exist as to what constitutes this crime and serious human rights abuse. The use of different interpretations (for example, differing interpretations of who the victims are, where they can be found, and what trafficking violations are) makes it difficult to compare data on an international level. In addition, the fact that some states concentrate on trafficking for purposes of sexual exploitation means that other forms of exploitation are overlooked. The different quality and documentation of national referral mechanisms (thought by some nongovernmental organizations (NGOs) to provide useful sources of data) also contributes to the difficulty of estimating the global scope of the problem, with the largest challenge being the hidden nature of human trafficking.

Trafficking in persons often does not come to the attention of national or local authorities or NGOs dealing with the issue. Victims can be reluctant to report the traffickers due to control, intimidation, debt bondage, "juju," threats of violence, and fear of being deported or removed to their origin country. Further, authorities often have difficulties in detecting the crime. The hidden nature of human trafficking makes estimations of its prevalence very challenging. Traditional methods that are used to measure hidden crimes, such as general victimization surveys, often are not feasible for collecting data on trafficking in persons.

It is also necessary to be very clear about the breadth of "human trafficking," as the optimum methodology for collecting data will vary according to the nature of the trafficking. 207

Data Needed to Analyze the Topic

Information concerning the hidden as well as the known aspects of human trafficking is needed to assess the specific policy needs. In addition, the prevalence of trafficking victims, which indicates the severity of trafficking in persons, can only be assessed if the hidden and known human trafficking is estimated. This estimation may need to include quantitative data, which often are based on official statistics, as well as qualitative data based on different sources of information, including field research and work being undertaken by NGOs.

Current data collection is mainly focused on information on detected cases of trafficking in persons. National-level data (quantitative and qualitative) on detected

²⁰⁶ United Nations General Assembly, Resolution 55/25, "Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children, supplementing the United Nations Convention against Transnational Organized Crime," November 15, 2000.

²⁰⁷ For example, in the report, "Stolen Future: Trafficking for Forced Child Marriage in the UK," Farhat Bokhari, End Child Prostitution, Child Pornography and Trafficking of Children for Sexual Purpose, United Kingdom, 2009. The researcher uses interviews with professionals, NGOs, police, and others, and data held by the Foreign and Commonwealth Office's (FCO's) Forced Marriage Unit.

cases can be collected from different sources, particularly from administrative records, including criminal justice and other official records, such as police, social services, immigration and asylum, and border control sources, as well as from information based on services provided to trafficking victims. Although this kind of information about known trafficking cases cannot be used to measure the prevalence of trafficking, it can be used to determine the human trafficking flows, profiles of detected victims and offenders, forms of exploitation, and responses to trafficking in persons and (in some cases) the efficiency of these responses. Because of the differences between practices and recording methods used in different countries, this kind of data is usually not suitable for comparative analysis. However, it can be used to monitor trends at the global, regional, and national levels. Further, the data on detected cases can be viewed in relation to other indicators that describe socioeconomic situations, rule of law, policy decisions, and security issues.

The hidden side of trafficking in persons is more difficult to measure. Since traditional methods to assess hidden phenomena such as general household victimization surveys are usually not suitable for measuring human trafficking, more innovative methods are needed. These include specific methods that have been tested to estimate the prevalence of hidden populations, such as respondent-driven sampling, capture-recapture methodology and the multiplier method, the network scale-up method, counting the actual numbers of human trafficking, and constructing a sampling frame of potential victims by using geographic data. Other methods are being developed by NGOs, for example the work of the Anti-Trafficking Monitoring Group in the United Kingdom.

Existing Sources and Standards for Data Collection

- UNODC Global Report on Trafficking in Persons 2009, 2012, and 2014, www. unodc.org/glotip.html
- UNODC Human Trafficking Case Law Database, http://www.unodc.org/cld/index.jspx
- International Organization for Migration (IOM) Counter Trafficking Module Database, http://www.iom.int/cms/countertrafficking
- International Labour Organization (ILO) Global Estimate of Forced Labour 2012: Results and Methodology, 2012, http://www.ilo.org/global/topics/forced-labour/publications/WCMS_182004/lang—en/index.htm
- ILO Profits and Poverty: The Economics of Forced Labour, http://www.ilo. org/global/publications/ilo-bookstore/order-online/books/WCMS_243391/ lang—en/index.htm.

²⁰⁸ On methodologies to research hidden populations, including trafficking in persons, see Forum on Crime and Society, Volume 8, UNODC (https://www.unodc.org/documents/data-and-analysis/Forum/Forum_2015/15-00463_forum_ebook_E.pdf).

Data Gaps and Challenges

- Administrative data on trafficking in persons do not accurately represent the nature or extent of the underlying activity, and it is very difficult to compare between countries.
- Some countries do not have specific legislation on human trafficking, or do not criminalize some activities that fall under the definition in the United Nations Protocol against Trafficking in Persons.
- There is a variety of ways in which trafficking-related behavior is criminalized, which is captured in diverse languages and legal traditions.
- Even countries with the appropriate legislative framework vary tremendously in the resources available for enforcement and the way these resources are targeted.
- Detection of victims and traffickers is difficult; often some forms and some victims
 are more easily detected than others. (The likely result is overrepresentation of
 trafficking in women for sexual exploitation and underrepresentation of trafficking
 in men for forced labor. Children are often invisible in any records or counts.)
- Countries have different capacities to produce administrative data, which means that the results for some regions are more reliable than those for others.
- Regional analyses for Africa and Asia are based on weaker official data than those for Europe or the Americas, due to lower levels of reporting from African countries, as well as lower detection rates. As a consequence of this geographical detection bias, the global results on patterns and flows tend to reflect the patterns and flows of Europe and the Americas to a greater degree than those of Africa and Asia. However, there are quite a lot of qualitative data from NGOs, for example, "Trafficking in Women, Forced Labour and Domestic Work in the Context of the Middle East and the Gulf Region," Working Paper, Anti-Slavery International, 2006.
- Data from service providers give information related only to those victims who are identified and receive services
- The prevalence of trafficking in persons is difficult to estimate reliably because of the hidden nature of crime.

Good Practice

Box 17. 1 Presents the IOM's data management tool, the IOM Global Human Trafficking Database. Other examples of good practice include:

Forum on Crime and Society, Special Issue: Researching Hidden Populations—Approaches and Methodologies to Generate Data on Trafficking in Persons, Volume 8, United Nations Office on Drugs and Crime.

BOX 17.1 IOM Global Human Trafficking Database

For more than a decade, IOM has developed and maintained a standardized counter-trafficking data management tool, the IOM Global Human Trafficking Database, which is the largest global database with primary data on victims of trafficking.

The Database facilitates the management of all IOM direct assistance, movement and reintegration processes through a centrally managed system, as well as mapping victims' trafficking experiences. In return, the databases strengthens research capacity and the understanding of the causes, processes, trends and consequences of trafficking. It serves as a knowledge bank from which statistics and detailed reports can be drawn, and information be provided for research, programme development and policy-making on counter-trafficking.

In all cases, IOM ensures that no information which could compromise the privacy or identity of trafficked individuals is released: strict controls designed to ensure confidentiality and security of all data have been established.

The publication aims at presenting a variety of research approaches and findings, hoping to contribute to a discourse on how more sound data on the different aspects of trafficking in persons could be researched and obtained. The articles presented in the Forum issue deal with challenges and solutions in collecting research data on trafficking in persons; present quantitative and qualitative aspects in reaching hidden populations, and discuss how to use them for human trafficking research.

Hard to See, Harder to Count: Survey Guidelines to Estimate Forced Labour of Adults and Children, International Labour Organization, 2012

The guidelines share the experiences gained and lessons learned by the ILO between 2008 and 2010, through quantitative surveys of forced labor and human trafficking undertaken at the country level. Designed by the ILO in collaboration with national partners, the tools were tested in 10 participating countries: Armenia, Bangladesh, Bolivia, Georgia, Guatemala, Côte d'Ivoire, Mali, Moldova, Nepal, and Niger. Notwithstanding significant differences in the types and mechanisms of forced labor of adults and children prevalent in these countries, a consistent approach was employed in the survey design and implementation.

Beneath the Surface: Methodological Issues in Research and Data Collection with Assisted Trafficking Victims, International Organization for Migration, 2010

The report considers the methodological and ethical challenges of conducting research and collecting human trafficking data. The analysis contained in this study sheds light on the debate about the current quality and integrity of research and

data collection in the trafficking field, and offers recommendations to improve future efforts to produce reliable data and derive an empirically-based understanding about the nature of human trafficking. The authors draw, in particular, on lessons learned from the use of the IOM human trafficking database as the basis of many current reports about the nature of trafficking in countries around the world. In addition to highlighting some of the limitations of collecting data directly from assisted victims, the report calls for more accurate and in-depth research and data collection on a broader range of topics related to trafficking.

Key Messages and Recommendations to Address Gaps

There is a need to collect data on the known and hidden dimensions of trafficking in persons.

Recommendations

- Use data on detected cases of trafficking for trend analysis at the national, regional, and global levels; administrative data do not usually allow comparisons of trafficking patterns and forms between countries, because of differences in definitions, procedures, recording, and other factors.
- Use innovative methodologies to assess the hidden part of trafficking in persons; data on detected human trafficking victims should not be used to estimate the total prevalence of trafficking in persons, but they are useful for assessing the characteristics of detected victims of trafficking.
- Support national capacities to produce data on trafficking in persons.
- Use existing international and national surveys for analysis.
- Take advantage of existing data collection vehicles, especially in industrialized countries.
- Encourage collection and analysis of data in micro-level settings; do not rely on current estimates.
- Carefully define indicators for trafficking with common characteristics to allow for the development of common measures that reflect all international legal frameworks.
- Establish a global "test bank" to host various examples of trafficking instruments together with their supporting documents and validation studies.

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Annex A

Guidelines

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Note: DTM = Displacement Tracking Matrix; ICLS = International Conference of Labour Statisticians; ILO = International Labour Organization; IMF = International Monetary Fund; IMRC = International Migration Research Center IOM = International Organization for Migrants; MIPEX = Migrant Integration Policy Index; OECD = Organisation for Economic Co-operation and Development; UNDESA = United Nations Department of Economic and Social Affairs; UNESCO = United Nations Educational, Scientific and Cultural Organization; UNESCWA= United Nations Economic and Social Commission for Western Asia; UNFPA= United Nations Population Fund; UNHCR = United Nations High Commissioner for Refugees; UNODC = United Nations Office on Drugs and Crime.

TABLE A.1 Guidelines, Training and Good Practice Material, by Theme

Theme	Guidelines	Training	Good practice
Key definitions and sources Criteria, data sources, innovative data sources		UNESCWA 2009; UNDESA 2012	Eurostat 1996–2013
Reasons for migration Work, study, humanitarian	UNHCR 2007	IOM 2010; UNHCR 2015a, 2015b, 2011, 2003	ILO 2013a, 2013b; UNESCO, OECD, and Eurostat; The Groningen Declaration 2012–15; UNHCR 2015, 2008
Migration and development Remittances, labor market, trade, intellectual property, health, education, environment	ICLS 2013	IMF 2009	World Bank 2015; MIPEX 2015; OECD 2010; IOM 2010; IOM DTM
Protection of migrants Human rights, women, migrant girls, trafficking in persons	ILO 2012	UNFPA 2011; UNODC 2015; IOM 2010;	Passel and Cohn 2011, 2009; Taylor et al. 2011; Pew Research Center 2013; UN 2009; IMRC 1996–2015; Levine et al. 2009; Temi et al. 2013

HANDBOOK FOR IMPROVING THE PRODUCTION AND USE OF MIGRATION DATA FOR DEVELOPMENT









