

GUIDE TO ENHANCING MIGRATION DATA IN WEST AND CENTRAL AFRICA



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ACRONYMS

CARIM	Consortium for Applied Research on International Migration
CEDEAO	Communauté Économique des États de l’Afrique de l’Ouest [Economic Community of West African States]
CERPOD	Center for Study and Research on Population for Development
CGD	Center for Global Development
DHA	Department of Home Affairs
DHS	Demographic and Health Surveys
EC	European Commission
ECOWAS	Economic Community of West African States
EPAM	Enquête Permanente Emploi Auprès des Ménages [Permanent Household Survey on Employment]
ESAM	Enquête Sénégalaise Auprès des Ménages [Senegalese Household Survey]
ESP	Enquête sur les Priorités [Survey on Priorities]
Eurostat	Statistical Office of the European Commission
GFMD	Global Forum on Migration and Development
HBS	Household Budget Survey
IDB	International Data Base
IES	Income Expenditure Survey
ILM	Database on International Labour Migration Statistics
ILO	International Labour Organization
INED	Institut National d’Etudes Démographiques [National Institute for Demographic Studies]
IUSSP	International Union for the Scientific Study of Population
LFS	Labour Force Survey
LSMS	Living Standards Measurement Study
MAFE	Migrations between Africa and Europe
MPI	Migration Policy Institute
NESMUWA	Network of Surveys on Migration and Urbanization in West Africa
OECD	Organisation for Economic Co-operation and Development
SSA	Statistics South Africa
UNDESA	United Nations Department of Economic and Social Affairs
UNDP	United Nations Development Programme
UNECE	United Nations Economic Commission for Europe
UNGMDB	United Nations Global Migration Database
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children’s Fund
UNPD	United Nations Population Division
UNSD	United Nations Statistics Division
USAID	United States Agency for International Development
WCA	West and Central Africa

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FOREWORD

Over three years IOM has prepared Migration Profiles for 32 countries in different parts of the world, including Eastern Europe, the Black Sea region, South America and Africa. Migration Profiles were first proposed by the European Commission (EC) in the Communication on Migration and Development in 2005. According to this document, Migration Profiles should be a statistical report providing information on a range of issues related to migration in the European Union's partner countries and conceived as a tool for the EC to inform community assistance programmes for third countries in the field of migration, as well as poverty reduction strategies. In Western and Central Africa, IOM takes the original Migration Profile concept further. In the IOM Migration in West and Central Africa: National Profiles for Strategic Policy Development project, Migration Profiles are conceived as being more than just statistical reports: they are also intended to be government-owned tools for facilitating policy development. With the financial support of the EC, the Swiss Federal Office for Migration and the Belgian Development Cooperation, IOM is implementing this project in the Democratic Republic of the Congo, Côte d'Ivoire, Ghana, Mali, Mauritania, Niger, Nigeria and Senegal, while Migration Profiles have also been prepared in Cape Verde and Cameroon.

The Migration Profiles are a key result of this project. They bring together existing information from different sources in a structured manner and provide a comprehensive overview of key international migration and socio-economic development trends in the target countries. They also identify data gaps and potential strategies to improve data collection for policy planning purposes.

This data guide aims to provide useful recommendations for updating these Migration Profiles, or when developing a new one in other countries within the region. The guide will look at how to apply concepts and definitions related to the measurement of international migration, and discusses how the collected data can better support the policymaking process. In this way, the guide aims to improve the quality of the statistical report and to promote the sustainability of the whole Migration Profile process, which is key to transforming Migration Profiles into an effective information tool for policymaking.

We would like to thank the consultants Professor Michel Poulain (FNRS – Catholic University of Louvain, Belgium) and Anne Herm (EKDK – Tallinn University, Estonia) for preparing this guide, and Rudolf Anich and Jobst Koehler (Migration Research Division, IOM) for providing useful inputs and reviewing the draft report.

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RESUMÉ

Malgré une prise de conscience accrue de l'importance de la migration internationale, les données les plus élémentaires restent lacunaires et peu fiables dans de nombreux pays. Or, le besoin de disposer de statistiques plus complètes sur le phénomène migratoire international devient criant. Pour aider les pays dans cette tâche, les Nations Unies avaient révisé, en 1998, leurs Recommandations en matière de statistiques des migrations internationales, et proposé un cadre extrêmement complet et précis de collecte de données statistiques. Cependant, une étude des données actuellement communiquées aux Nations Unies fait apparaître qu'il n'est pas facile de se conformer à ces recommandations. Aussi, dans la perspective des préparatifs des recensements de population du cycle de 2010, il a été décidé que ceux-ci comprendraient des questions spécifiques permettant de recueillir des données sur la migration internationale. Le présent ouvrage vise à aider les pays d'Afrique de l'Ouest et du Centre à se conformer au mieux à ces recommandations. Il examinera en outre les possibilités d'utilisation future des sources de données administratives.

Ce guide s'articule autour de trois parties : la partie I présente les notions et définitions essentielles qui se rapportent à la mesure de la migration internationale, qu'il est parfois difficile de mettre en pratique. Dans la partie II, des méthodes plus commodes, utilisant diverses sources de données, dont les recensements de population, les enquêtes et les sources de données administratives, sont proposées pour mesurer les données relatives aux flux migratoires internationaux et à la population de migrants internationaux. Enfin, la partie III passe en revue les moyens d'améliorer l'utilisation des données recueillies dans les pays d'Afrique de l'Ouest et du Centre aux fins d'appui à l'élaboration des politiques, et examine l'utilité d'étudier les données recueillies par d'autres pays d'origine ou d'accueil de migrants.

Une analyse de ces sources de données potentielles permettrait ensuite, sur la base des résultats obtenus, d'évaluer la situation dans les pays d'Afrique de l'Ouest et du Centre, et de proposer des recommandations concrètes pour fournir des données fiables et comparables qui appuieraient l'élaboration de politiques efficaces. La plupart de ces recommandations sont formulées dans un rapport publié par la Commission sur les données relatives à la migration internationale pour la recherche et la politique de développement, intitulé *Migrants Count. Five Steps Toward Better Migration Data* (Centre pour le développement mondial, 2009).

La première recommandation consiste à introduire dans le recensement une série de questions pertinentes de façon à permettre la collecte d'informations sur la migration internationale. Outre les questions sur la nationalité (à ne pas confondre avec l'appartenance ethnique) et sur le pays de naissance, il conviendrait que le recensement comporte une question sur le lieu de résidence habituel à un moment donné du passé, ainsi que certaines questions sur les émigrants. Plusieurs pays d'Afrique de l'Ouest et du Centre ont déjà introduit un module sur l'émigration dans leur dernier recensement, qui leur a permis de recueillir des données sur les caractéristiques des émigrants. Nous recommandons que tous les pays d'Afrique de l'Ouest et du Centre élaborent et mettent en place un module normalisé de questions relatives à l'émigration. L'analyse comparative des résultats obtenus améliorera l'utilité de ces données. En outre, alors que tous les pays introduisent des questions sur la fertilité et la mortalité infantile, destinées à toutes les personnes de sexe féminin âgées de 14 ans et plus, nous recommandons d'ajouter une question sur le lieu ou le pays de résidence habituel de chaque enfant survivant.

La deuxième recommandation a trait à la diffusion précise et rapide des données recueillies. Chaque pays devrait ouvertement diffuser les données de base issues du recensement suivantes : pays de naissance, pays de nationalité et pays précédent de résidence (une ou cinq années auparavant), tabulées par i) sexe, ii) âge et iii) niveau d'éducation.

La troisième recommandation vise à mieux utiliser les sources de données administratives disponibles concernant, entre autres, les passages de frontière, les visas, les permis de travail et de séjour, et l'état civil – qui toutes permettront de mieux comprendre les caractéristiques des migrants internationaux. Pour ce faire, il y a lieu de resserrer la coopération entre les ministères chargés de la migration et les instituts statistiques nationaux.

La quatrième recommandation consiste à introduire un module sur la migration dans les enquêtes auprès des ménages afin de mieux comprendre les liens entre le processus migratoire et le développement humain. C'est là le seul moyen de réunir des informations précises sur les migrants dans les pays où, faute de ressources, il n'est pas possible de réaliser des enquêtes exclusivement consacrées aux migrants.

La cinquième recommandation se rapporte à l'échange d'informations aux niveaux bilatéral et multilatéral, et à l'exploitation des bases de données internationales. Les données sur l'immigration fournies par les pays d'accueil peuvent combler certaines lacunes des statistiques relatives à l'émigration des pays d'origine et permettre de mieux comprendre les flux sortants. En outre, elles peuvent garantir la qualité des données existantes sur l'émigration quant à leur couverture, leur fiabilité et leur degré d'actualité. Outre l'harmonisation des termes et définitions citée plus haut, le partage de données entre les pays peut permettre d'obtenir des informations importantes. Pour cela, il faut toutefois que chaque pays qui communique des données fournisse des informations détaillées sur le pays de naissance, le pays de nationalité et le pays précédent de résidence, et diffuse toutes les données dont il dispose.

EXECUTIVE SUMMARY

Despite the growing recognition of the importance of international migration, the most basic data continue to be weak and unreliable in many countries and there is an obvious need to improve international migration statistics. To assist countries in this task, the United Nations revised in 1998 its Recommendations on Statistics of International Migration and provided a very comprehensive and detailed framework for the statistical data collection. However, an investigation of the data currently provided to the United Nations shows that these recommendations are not easy to follow. Accordingly in view of the preparations already under way for the 2010 round of population censuses, it was decided that the censuses should include specific questions in order to collect data on international migration. This guide is designed to assist countries in West and Central Africa (WCA) in implementing these recommendations in the most appropriate way. It will also consider the possible future use of administrative data sources.

The guide consists of three parts: Part I presents the basic concepts and definitions related to the measurement of international migration, which can sometimes be difficult to apply in practice; Part II proposes more practical ways of measuring international migration data for both flows and stocks by using different types of data sources, including population censuses, surveys and administrative data sources; and Part III discusses how to improve the use of the data collected in West and Central African countries in terms of policy support, in addition to exploring the usefulness of investigating data collected by other migrant-sending or -receiving countries.

Based on an analysis of these potential data sources, the situation in West and Central African countries would be assessed and concrete recommendations proposed with a view to providing reliable and comparable data that would support the development of effective policies. Most of these recommendations were presented in a report released by the Commission on International Migration Data for Development Research and Policy: *Migrants Count. Five Steps Toward Better Migration Data* (Center for Global Development, 2009).

The first recommendation is to introduce the relevant set of questions in the census so that information on international migration can be collected. In addition to questions on citizenship (not to be confused with the issue of ethnicity) and country of birth, the census should include a question about the place of usual residence at a fixed time in the past. This part of the census should also include some questions on emigrants. Several West and Central African countries already introduced an emigration module in their last census, collecting information on the characteristics of emigrants. We recommend that a standardized emigration module be elaborated and introduced by all West and Central African countries. The comparative analysis of the results will help to improve the usefulness of these data. Moreover, as all countries are introducing questions relating to fertility and infant mortality, to be asked of all females aged 14 and over, we recommend adding a question on the place or country of usual residence of every surviving child.

The second recommendation is to disseminate the collected data in a detailed and speedy fashion. The essential census-based data that each country should publicly disseminate are: country of birth, country of citizenship, and country of previous residence (1 or 5 years ago), tabulated by (i) sex, (ii) age and (iii) level of education.

The third recommendation is to make better use of administrative data sources such as border crossings, visas, work and residence permits, and population registers, where available – all of which will provide a better understanding of the characteristics of international migrants. Doing so requires closer cooperation between ministries in charge of migration and national statistical institutions.

The fourth recommendation is to include a migration module in household surveys in order to better understand the links between the migration process and human development. This is the only feasible method of gathering detailed information on migrants in countries where resource constraints prohibit specialized surveys focusing exclusively on migrants.

The fifth recommendation is to exchange data on a bilateral and multilateral basis and to mine international databases. Immigration data from receiving countries may help to fill some of the gaps in emigration statistics of sending countries and provide for a better understanding of the outflows. Additionally, they may provide quality assurance for existing emigration data in terms of coverage, reliability and timeliness. Data sharing between countries, in addition to the aforementioned harmonization of terms and definitions, may yield important information. For this to be effective, however, each country involved in data sharing would have to provide detailed information on country of birth, citizenship and previous residence, and to disseminate all available data.

INTRODUCTION

International migration is becoming increasingly important worldwide, both politically and economically. Migration is also an important component of the population balance at national levels, and accurate migration data are therefore essential for population projections. Data on population stocks relating to international migration are just as important as those relating to international migration flows. Stock data are particularly relevant to the development of policies relating to integration and multicultural society, as well as to those relating to brain drain and the labour market. In this respect, the key population stock varies between countries, depending on whether the country is traditionally a migrant-sending or -receiving country, or a country involved in transit migration:

- In an immigration country, the focus with data collection will be on the population with some kind of foreign background, such as being born in another country, not holding the citizenship of the country, or having parents who were born abroad, bearing in mind that “foreign background” cannot be strictly defined.
- In an emigration country, the key issue relates to citizens living abroad, and there is a need to define the population as composed of all citizens, including those living abroad and excluding all non-citizens living in the country. Data on citizens living abroad are important for all emigration countries, particularly in terms of supporting policies relating to citizens working abroad on a seasonal or longer-term basis, to highly skilled emigrants, and to incentives and reintegration policies for returning citizens.
- In a country involved in transit migration, it is essential to monitor the stock of transit migrants, since they may have an impact on the local community.

Despite the growing recognition of the importance of international migration, the most basic data continue to be weak and unreliable in many countries and there is an obvious need to improve international migration statistics. To assist countries in this task, in 1998 the United Nations revised its Recommendations on Statistics of International Migration and provided a very comprehensive and detailed framework. However, an investigation of the data provided to the United Nations shows that these recommendations were not being followed, and a more recent meeting organized by the United Nations concluded that the recommendations were not easy to apply in practice (UNDESA, 2007). In view of the preparations already under way for the 2010 round of population censuses, it was therefore decided that the censuses would focus on collecting statistics on international migration, and a complete set of questions was recommended in the United Nations Principles and Recommendations for Population and Housing Censuses (2008). The current guide is designed to assist West and Central African (WCA) countries in implementing these recommendations in the most appropriate way. It will also consider the possible future use of administrative data sources. Since an overview of existing household and migration surveys was recently presented by Schachter (2008), it will not be included in any detail in this guide.

The guide consists of the following three parts:

- Part I presents the basic concepts and definitions relating to the measurement of international migration, from a theoretical viewpoint. Harmonizing these concepts and definitions is a key aspect, however such concepts can sometimes be difficult to apply in practice. The following two sections will therefore propose more practical ways of measuring international migration data for both flows and stocks by using specific types of data sources.
- Part II provides guidelines on using population censuses, surveys and administrative data sources to measure and characterize flows and stocks relating to international migration. As mentioned above, the use of surveys will not be discussed here but it is important to note that household surveys generally include migration-related questions similar to those recommended by the United Nations for the census questionnaire.
- Part III discusses how to improve the use of the data collected in West and Central African countries in terms of policy support, in addition to considering the usefulness of investigating data collected by

other migrant-sending and -receiving countries, through bilateral data-sharing initiatives and access to the most important international databases.

The development of the methodological part of this guide has taken advantage of previous works on harmonization of international migration statistics in the European Union and more specifically of the following contributions: Poulain et al. 2006, Cantisani et al. 2006, Herm, 2006 and Novak et al. 2006.

PART I – HARMONIZATION OF MAIN CONCEPTS, DEFINITIONS AND TERMS USED FOR THE PRODUCTION OF INTERNATIONAL MIGRATION STATISTICS

I. Key definitions and concepts relating to international migration

The basic definition of an international migrant given by the United Nations *Recommendations on Statistics of International Migration* (United Nations, 1998) is “any person who changes his or her country of usual residence.” This definition is closely linked to the definition of an individual’s place of usual residence and, more specifically, of his or her country of usual residence. Accordingly, it is important to define precisely what “country of usual residence” means and to establish a criterion for the duration of stay within or outside a given country in order to determine whether it constitutes international migration.

Country of usual residence

The term “country of usual residence” is used to distinguish a migrant from a visitor. It is also used to determine the usual resident population count in a country. In general, countries are most interested in the number and distribution of usual residents, since this is usually the best indication of where people require and consume services, and a count of such residents is therefore most relevant for planning and policy purposes. Usual residents of a country may have citizenship or not, and they may also include undocumented persons, applicants for asylum and refugees.

According to the United Nations *Principles and Recommendations for Population and Housing Censuses*, Revision 2 (UNDESA, 2008) the place of usual residence is defined as follows:

1.461. In general, “usual residence” is defined for census purposes as the place at which the person lives at the time of the census, and has been there for some time or intends to stay there for some time.

1.462. Generally, most individuals enumerated have not moved for some time and thus defining their place of usual residence is clear. For others, the application of the definition can lead to many interpretations, particularly if the person has moved often.

1.463. Place of usual residence

1. The place at which the person has lived continuously for most of the last 12 months (i.e., for at least six months and one day), not including temporary absences for holidays or work assignments, or intends to live for at least six months.
2. The place at which the person has lived continuously for at least 12 months (not including temporary absences for holidays or work assignments), or intends to live for at least 12 months.

The definition of country of usual residence is given as:

“The country in which a person lives, that is to say, the country in which he or she has a place to live where he or she normally spends the daily period of rest. Temporary travel abroad for purposes of recreation, holiday, visits to friends and relatives, business, medical treatment or religious pilgrimage does not change a person’s country of usual residence.”

An international migrant, also identified as a long-term international migrant, is accordingly defined as:

“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. From the perspective of the country of departure the person will be an emigrant and from that of the country of arrival the person will be an immigrant.”

In addition to the definition of long-term international migrant, the United Nations (1998) defines a short-term migrant as “a person who moves to a country other than that of his or her usual residence for a period of at least 3 months but less than a year (12 months)”. It should be borne in mind that short-term migrants (mostly seasonal workers) are also an important factor in labour migration. However, for the purposes of this guide, only long-term migrants will be considered hereafter.

The recommendations are inconsistent in terms of the definition of place of usual residence, allowing for population stock and migration flow to be defined on two different bases, in terms of the time criterion. However, in order to ensure consistency between international migration flows and the census counts of the population usually residing in the country, the “at least 12 months” criterion should be used so that every immigration results in one person being added to the population stock of the country and every emigration results in one being subtracted. Moreover, the second definition considering a period of at least 12 months is the only one that is in agreement with the recommendations for tourism statistics.¹ Therefore, we recommend using only the “at least 12 months” criterion and will do so throughout this guide.

According to this definition, the usually resident population is the de facto population effectively living in the territory, while the de jure population refers to the population living in the territory and having the legal right to do so. The latter is also called the legal population and is often the only one considered from an administrative point of view.

International migration

Generally speaking, there is a basic difference between the concept of flow and that of stock. Flow data are related to the events that happen on a continuous basis and are counted during a given period of time that is usually one calendar year, while stock data present the situation of a given population at one point in time. The flow data include the characteristics of the events (immigrations and emigrations), and of the persons involved in these events (immigrants and emigrants), while stock data present the size and characteristics of persons who make up the population at that precise moment. In the case of international migration flows, the events in question are international migrations, and the persons involved in these events are defined as international migrants. For stock, we will only consider the population groups that are relevant to international migration, which include all persons who are directly or indirectly linked to such migration.

Since any international migration changes the population stock figure, it is considered to be a demographic event. International migration flow data consist of the number of international migrations counted for a given country during a given period; considering the origin and destination of the migrants involved, the following two concepts are used for the migration flows:

- International immigration flow is the number of international immigrations in a given country over the course of a specified period, usually a calendar year.
- International emigration flow is the number of international emigrations from a given country over the course of a specified period, usually a calendar year.

As explained in the previous section, the period of at least a year used in the definition of international migrant is consistent with the “at least 12 months” threshold used in the definition of country of usual

¹ The concept of country of usual residence, based on at least 12 months’ residency, is also used to determine who is a visitor according to the UN Recommendations on Tourism Statistics (UNDESA/UNWTO, 1994).

residence. In practice, it may be based on either intended or actual duration of stay, depending on the data source used. When administrative registers are used, data based on intended duration of stay as reported by migrants at the time of registration may be compared ex post with the actual duration of stay. The latter may be considered as being more reliable even if only available one year later.

To summarize the criteria for defining a person as an immigrant in a given country, the following conditions must be met:

- entered the country by crossing the State border;
- has been a usual resident of another country before entering;
- transferred his or her usual residence to the receiving country for at least one year.

Similarly, an emigrant of a country must satisfy the following conditions:

- left the country by crossing the State border;
- has been a usual resident of this country;
- transferred his or her usual residence to another country for at least one year.

Relevance of international migration data to policy and research

There are three main reasons that data on migration flows are of relevance to policy and research. First, flow statistics are used in the population accounting system to produce an estimate of the total population in a country. Second, flow statistics are important in monitoring the trend of inflows of foreign citizens through the use of quotas (e.g. limiting the number of work permits granted or refugees receiving protection status) and for various other reasons such as well-being of the residents in the country, national security etc. that may be linked to the proportion of foreigners in the population. Third, flow statistics are also needed to estimate the emigration of nationals and to evaluate its impact on society.

Depending on the reason for compiling flow statistics in a country, the degree of detail needed for migration statistics varies. If determining the population balance is the main reason, counting the total annual numbers for immigrants and emigrants by age and sex may be sufficient. However, for more in-depth analysis and policy support, the data collection on immigration and emigration flows must include more detailed information on immigrants and emigrants. The following discussion can provide some insight on how data on different groups of people can be identified and categorized.

Key indicators for identifying population groups relevant to international migration

The key indicators for identifying a person having some personal involvement in international migration are country of birth, current citizenship and mode of acquisition of citizenship (by birth or by naturalization), and international migration experience.

Country of birth

If a persons' country of birth is different from their country of usual residence, this is the most direct indicator of international migration. Information on country of birth is usually derived from the place of birth, which is defined in the United Nations *Principles and Recommendations for Population and Housing Censuses*, as follows:

2.58. The place of birth is the civil division in which the person was born or, for those born in other countries, the country of birth. For persons born in the country where the census is taken (the native-born population), the concept of place of birth usually refers to the geographical unit of the country in which the mother of the individual resided at the time of the person's birth.

In some countries, however, the place of birth of natives is defined as the geographical unit in which the birth actually took place. Each country should explain which definition it has used in the census.

Logically, the two complementary population groups based on country of birth can be defined as follows:

- foreign-born – persons who were born in another country;
- native-born – persons born in the country.

Citizenship

Of all the characteristics pertaining to a migrant, citizenship is probably the most important, as well as being the one most often used. Generally, the most basic categorization of international migration flows introduces distinctions – between immigration and emigration, on the one hand, and between citizens of a given country and non-citizens, on the other.

Citizenship is defined by the United Nations *Principles and Recommendations for Population and Housing Censuses* as follows:

2.97. Citizenship is defined as the particular legal bond between an individual and his/her State. A citizen is a legal national of the country of enumeration; a foreigner is a non-national of the country (that is, a citizen of another country) ...

Again, logically, the two complementary populations groups based on citizenship can be defined as follows:

- foreigners – persons who do not hold the citizenship of a given country;
- nationals – citizens of a given country.

Both foreigners and nationals can be either foreign-born or native-born.

The citizenship at birth can be different from the current citizenship at the time of data collection. Additional information is therefore needed on changes of citizenship, in order to distinguish between those who are nationals by birth and those who are nationals by naturalization, whether by declaration, option, marriage or other means. Moreover, special attention should be devoted to those holding several citizenships.

Migration experience

An international migration event – be it immigration or emigration – has been defined by the United Nations as a demographic event (see above). Whether or not a given person has experienced international migration is a key indicator for identifying relevant population groups. In this context, if a person has migrated internationally several times, usually only the last migration is important – the one whereby the person entered or left the country in question.

Based on this information, the following three population groups can be defined:

1. those who never migrated to or from a given country;
2. those who migrated only once, emigrating from or immigrating into a given country;
3. those who undertook more than one international migration relating to a given country (in which case only the last international migration is taken into consideration).

Other key indicators

Several other key indicators relevant to international migration have been suggested by the United Nations in its recommendations. Determining the year of arrival in the country, the total duration of residence in the country or in the country of usual residence one or five year(s) ago (in the country concerned or abroad) can help to distinguish between recently arrived immigrants and those who have been living in the country for a longer period of time. The reason for migration could also bring an additional disaggregation of population groups relevant to international migration. However, if the reason is self-reported it may be subjective. Only if the reason for migrating is for the purpose of obtaining a residence permit can it be considered as relatively objective and valid information. More detailed population groups can be identified by considering certain characteristics of parents, such as their country of birth or citizenship. Even if these additional indicators helped to identify other population groups relevant to international migration, such as second- and third-generation migrants composing the diaspora, such information is generally not available. To collect data on the diaspora, such questions should be asked in the receiving country, since it is difficult to obtain information about the diaspora in the country of origin. Accordingly, limiting the investigation to the three key indicators presented above seems to be the most pragmatic solution.

2. Classification of population groups relevant to international migration

The United Nations *Recommendations on Statistics of International Migration* (1998) presented a taxonomy of international inflows and outflows of people, in an attempt to identify the types of flows that are most likely to be reflected in the statistics produced by existing data collection systems. This guide will only discuss the categories that are relevant to international migration as defined in the same recommendations (categories 9 to 18 of the United Nations taxonomy). The country of usual residence for people such as border workers, diplomatic and military personnel as well as their dependants cannot be established unambiguously and such persons are usually excluded from international migration statistics. People who are granted short periods of stay for the purpose of tourism or business travel are not considered as international migrants either. These groups are therefore not discussed in this guide.

The guide does, however, consider the various population groups relevant to international migration policy that may be identified through the aforementioned key indicators: country of birth, citizenship by birth and by naturalization, and international migration experience. In table 1, these characteristics are cross-tabulated to distinguish the following pairs of groups:

- foreigners and nationals, with a further distinction being made between nationals by birth and nationals by naturalization;
- foreign-born and native-born;
- persons having had different migration experiences (those who never migrated, those who only immigrated or emigrated, and those who experienced both types of migration).

These population groups are seen from the viewpoint of the receiving country and thus anyone who is not a national is considered to be a foreigner and anyone who is not native-born is considered to be foreign-born. The 18 population groups resulting from this combination of characteristics are not equally relevant to international migration, and two of these have no relevance: the native-born nationals who have never migrated from their country and the (foreign-born) foreigners who have never migrated to this country.

In table 1, the 18 population groups are clustered into two main categories, both of which are of interest to policymakers and migration researchers: those living in the country (as part of the total population of the country) and those living abroad.

Table 1: Classification of population groups according to characteristics that refer to migration or foreign background

		Nationals		Foreigners
		by birth	by naturalization	
Native-born	Never migrated	Native-born nationals by birth who never migrated	Native-born nationals by naturalization who never migrated	Native-born foreigners who never migrated
	Only emigrated	Native-born nationals by birth who only emigrated	Native-born nationals by naturalization who only emigrated	Native-born foreigners who only emigrated
	Emigrated and immigrated thereafter	Native-born nationals by birth who emigrated and immigrated thereafter	Native-born nationals by naturalization who emigrated and immigrated thereafter	Native-born foreigners who emigrated and immigrated thereafter
Foreign-born	Never migrated	Foreign-born nationals by birth who never immigrated	Foreign-born nationals by naturalization who never immigrated	(Foreign-born) foreigners who never immigrated
	Only immigrated	Foreign-born nationals by birth who only immigrated	Foreign-born nationals by naturalization who only immigrated	(Foreign-born) foreigners who only immigrated
	Immigrated and emigrated thereafter	Foreign-born nationals by birth who immigrated and emigrated thereafter	Foreign-born nationals by naturalization who immigrated and emigrated thereafter	Foreign-born foreigners who immigrated and emigrated thereafter

Note: Shaded areas indicate population groups living in the country.

Population groups living in the country

Due to the lack of detailed data or need for policy-friendly information, the nine population groups living in the country are often more simply classified. The following three figures show the more frequently used classifications:

- nationals versus foreigners, based on current citizenship (table 2a);
- native-born versus foreign-born nationals, based on country of birth (table 2b);
- immigrants versus non-immigrants, based on immigration experience (table 2c).

Table 2a: Nationals versus foreigners

		Nationals		Foreigners
		by birth	by naturalization	
Native-born	Never migrated	Native-born nationals by birth who never migrated	Native-born nationals by naturalization who never migrated	Native-born foreigners who never migrated
	Emigrated and immigrated thereafter	Native-born nationals by birth who emigrated and immigrated thereafter	Native-born nationals by naturalization who emigrated and immigrated thereafter	Native-born foreigners who emigrated and immigrated thereafter
Foreign-born	Only immigrated	Foreign-born nationals by birth who only immigrated	Foreign-born nationals by naturalization who only immigrated	(Foreign-born) foreigners who only immigrated

Table 2b: Native-born versus foreign-born nationals

		Nationals		Foreigners
		by birth	by naturalization	
Native-born	Never migrated	Native-born nationals by birth who never migrated	Native-born nationals by naturalization who never migrated	Native-born foreigners who never migrated
	Emigrated and immigrated thereafter	Native-born nationals by birth who emigrated and immigrated thereafter	Native-born nationals by naturalization who emigrated and immigrated thereafter	Native-born foreigners who emigrated and immigrated thereafter
Foreign-born	Only immigrated	Foreign-born nationals by birth who only immigrated	Foreign-born nationals by naturalization who only immigrated	(Foreign-born) foreigners who only immigrated

Figure 2c: Non-immigrants versus immigrants (shaded)

		Nationals		Foreigners
		by birth	by naturalization	
Native-born	Never migrated	Native-born nationals by birth who never migrated	Native-born nationals by naturalization who never migrated	Native-born foreigners who never migrated
	Emigrated and immigrated thereafter	Native-born nationals by birth who emigrated and immigrated thereafter	Native-born nationals by naturalization who emigrated and immigrated thereafter	Native-born foreigners who emigrated and immigrated thereafter
Foreign-born	Only immigrated	Foreign-born nationals by birth who only immigrated	Foreign-born nationals by naturalization who only immigrated	(Foreign-born) foreigners who only immigrated

Population groups living abroad

As for the population groups living in the country, three simple classifications may be used to characterize the population living abroad and having some background in the country concerned. The three following figures show the possible classifications:

- nationals living abroad versus foreigners living abroad (table 3a) ;
- native-born nationals living abroad versus foreign-born living abroad (table 3b);
- emigrants living abroad versus non-emigrant living abroad (table 3c).

Table 3a: Nationals living abroad (shaded areas) versus foreigners living abroad

		Nationals		Foreigners
		by birth	by naturalization	
Native-born	Only emigrated	Native-born nationals by birth who only emigrated	Native-born nationals by naturalization who only emigrated	Native-born foreigners who only emigrated
Foreign-born	Never migrated	Foreign-born nationals by birth who never immigrated	Foreign-born nationals by naturalization who never immigrated	(Foreign-born) foreigners who never immigrated
	Immigrated and emigrated thereafter	Foreign-born nationals by birth who immigrated and emigrated thereafter	Foreign-born nationals by naturalization who immigrated and emigrated thereafter	Foreign-born foreigners who immigrated and emigrated thereafter

Table 3b: Native-born nationals living abroad (shaded areas) versus foreign-born living abroad

		Nationals		Foreigners
		by birth	by naturalization	
Native-born	Only emigrated	Native-born nationals by birth who only emigrated	Native-born nationals by naturalization who only emigrated	Native-born foreigners who only emigrated
	Never migrated	Foreign-born nationals by birth who never immigrated	Foreign-born nationals by naturalization who never immigrated	(Foreign-born) foreigners who never immigrated
Foreign-born	Immigrated and emigrated thereafter	Foreign-born nationals by birth who immigrated and emigrated thereafter	Foreign-born nationals by naturalization who immigrated and emigrated thereafter	Foreign-born foreigners who immigrated and emigrated thereafter

Table 3c: Emigrants living abroad (shaded areas) versus non-emigrants living abroad

		Nationals		Foreigners
		by birth	by naturalization	
Native-born	Only emigrated	Native-born nationals by birth who only emigrated	Native-born nationals by naturalization who only emigrated	Native-born foreigners who only emigrated
	Never migrated	Foreign-born nationals by birth who never immigrated	Foreign-born nationals by naturalization who never immigrated	(Foreign-born) foreigners who never immigrated
Foreign-born	Immigrated and emigrated thereafter	Foreign-born nationals by birth who immigrated and emigrated thereafter	Foreign-born nationals by naturalization who immigrated and emigrated thereafter	Foreign-born foreigners who immigrated and emigrated thereafter

3. Challenges involved in identifying population groups relating to international migration and their policy relevance

Several challenges may emerge when collecting data in accordance with the aforementioned concepts and definitions:

- identifying the country of usual residence and the total population of the country;
- identifying the current citizenship and country of birth, and the relevance of population groups based on these variables;
- identifying all international migrants and the relevance of the immigrant and emigrant stocks.

Identifying the country of usual residence and the total population of a country

A variety of possible interpretations of the term “country of residence” can result in a lack of clarity in the statistics relating to the usual resident population and international migrations. The country of residence can be interpreted from a legal (de jure) or an actual (de facto) point of view. As for the legal perspective, the laws and regulations of a given country specify requirements that have to be fulfilled in order to become a resident, and the conditions differ for citizens and non-citizens. In fact, citizens have an unconditional right of residence in their country of citizenship, whereas the rights of foreigners are subject to concrete conditions. Having a legal place of residence in a country does not necessarily mean a physical presence of a person in the territory. Citizens may still be counted as part of the resident population of their country of citizenship even if they have lived abroad for a number of years. Thus, in some countries citizens are not considered as emigrants and deleted from the resident population unless their actual absence is self-reported. Such situations lead to an overestimation of the resident population, which may affect the representativity of the country in

supranational entities where, as in the European Union (EU), for example, the population size is a key factor in the distribution of resources. On the other hand, some countries do not consider foreigners among their population until such individuals have gained the right to stay permanently.

The concept of country of usual residence is based on that of place of usual residence, with the latter being defined as the place where the person spends most of his/her daily rest periods. This definition excludes all places where the person stays for short-term holidays, visits, pilgrimages or business trips. The place of usual residence is a central place in an individual's life and is often referred to as home – the place from which they begin and end most daily excursions. Accordingly, special attention should be paid to the identification of the country of usual residence, since it may not necessarily be simply deduced by identifying the place of usual residence. However, this consideration is purely theoretical and considering the country of usual residence as the place of usual residence is the most workable method.

Interpreting the meaning of most of his/her daily periods of rest in order to enumerate a given person as usual resident can be done only on the basis of actual stay. The time criterion for assessing the actual stay of a person in the country is “at least 12 months”, and the country will be considered as the country of usual residence for a given person if the following conditions are met:

- the person lived in the country one year ago;
- during the last year, he/she spent most daily periods of rest in the country (for a cumulated time of more than six months);
- the minimum six months' daily periods of rest within the country do not include holidays, visits, pilgrimages or business trips.

Using these criteria, the country of usual residence would be defined on the basis of actual stay only. Accordingly, a person who arrived in a given country more than six months but less than one year ago would not be considered a usual resident of that country even if he/she stayed there continuously since immigrating. However, a person who entered the country during the last year could be counted as a usual resident if he/she intends to stay. Persons who entered the country during the last year and intend to spend most of their daily periods of rest within the country for one year starting from the date of arrival would also be considered a usual resident of that country.

In specific cases, when two countries may simultaneously be considered as being the country of usual residence because the daily periods of rest are distributed equally between the two (six months a year in each country or part of each week in one country and an equal part in the other), some additional criteria may be considered, such as the place of work, the country where the most family members and relatives are living, the country where the person owns most of his/her properties etc. In reality, however, it is not always feasible to confirm whether a given person is a usual resident in two different countries at the same time. For specific groups, some additional considerations may apply. For students and trainees, for example, only those whose study programme lasts for more than one academic year should be counted as usual residents, since the academic year never runs for a full 12 months. However, if the programme is spread over several academic years, annual trips back to the home country are considered as holidays and should not be taken into consideration when identifying the country of usual residence.

Duration of stay in the country or abroad is an important factor in determining the country of usual residence. However, countries differ in their assessment of time when identifying the place of residence or an international migration (defined as a change of country of usual residence). On the one hand, currently used national definitions often consider an international migration to have occurred when there is a change of the country of residence for a defined minimum period. On the other hand, some countries take only permanent changes of residence into account, although “permanent” does not necessarily mean the same thing in all countries. It can be taken literally or can simply mean long term, without any fixed-time criterion. Thus, immigrants may be counted as newcomers in the population stock and emigrants may be excluded from the stock, depending on the duration of their stay in the country or abroad.

When a precise time frame is used, another problem arises regarding the distinction between intended and actual duration of stay. The use of the actual duration concept means that the production of statistics would be systematically delayed by the period corresponding to the time needed to fully apply the definition of migration based on the 12-month rule. Currently, most countries that specify a precise time criterion use the intended duration. Therefore, an assumption is made that the intended duration will become the actual one. However, for non-citizens, the intended duration is usually limited to the period specified in their authorization to stay and, consequently, the statutory length of stay is often used instead of the immigrant's real intentions. This approach has some advantages. The legal time is objective and can be easily and accurately recorded by the receiving country. However, the number of foreigners physically present in the country often differs from that indicated by their initial authorization to stay. Foreigners may leave the country long before their permits expire, or their permits may be renewed and they may stay longer.

The time criterion can be applied to both former and future situations concerning migrations. Former situations may be based on self-reported retrospective information in censuses and surveys or on registered information in administrative databases, and both may suffer from biases resulting from memory problems or false declarations, or due to the fact that only official, legal administrative data are entered into administrative databases. In concrete cases, the reference period for assessing a former situation can be six or three months and not 12 months, as recommended. In the case of censuses or surveys, retrospective questions may relate to the place of residence five years ago, at the last census, at the time of a significant historical event and also at the time of birth (i.e. the country of birth). In all these variants, existing models may help in estimating the number of migrations and migrants, based on the recommended 12-month criterion.

For future situations, only the intended duration of stay or absence should be considered at the time of migration and it can only be compared *ex post* with the actual duration of stay or absence if a continuous population registration system exists. Four different situations can occur when comparing intended and *de facto* durations of stay or absence. Two of these are consistent:

- Intended and *de facto* durations of stay or absence are less than one year and the person concerned is not considered an international migrant, based on intention, and should not be effectively considered as such and, therefore, not counted as part of the population stock.
- Intended and *de facto* durations of stay or absence are both at least one year and the person concerned is considered an international migrant, based on intention, and is counted as part of the population stock.

The two other situations are more problematic as there are inconsistencies between intended and *de facto* durations of stay or absence:

- Intended duration of stay or absence is at least one year while the *de facto* duration is less than one year and, accordingly, the person concerned is considered an international migrant, based on intention, although he/she should not effectively be considered as such.
- Intended duration of stay or absence is less than one year while the *de facto* duration is at least one year and, accordingly, the person concerned is not considered to be an international migrant, based on intention, although he/she should effectively be considered as such.

Administrative data sources that follow individual migration histories on a continuous base allow for the identification of migrations based on various time criteria for both past and future scenarios, as well as for a comparison of intended and *de facto* durations of stay in the country or absence from the country. These results may be used in order to adjust the number of international migrations calculated according to the recommended 12-month criterion in countries without such system and using a different time criterion or no time criterion at all.

Other time-related problems must also be considered. Firstly, migrants are entered into the population stock at various dates. For immigrants, this might be the date on which their permit is issued, the date of

arrival or the date of reporting for registration; for emigrants, it could be the date of expiry of a permit, the reported or intended date of departure. Secondly, a reference period other than a calendar year might be applied, in some cases. In addition, when a very short (or no) duration of stay criterion is employed, an individual may migrate several times during the reference period. All of these events are counted separately in international migration statistics. When the one-year time limit is strictly applied and the data are collected on an annual basis, only one migration (immigration or emigration) can be counted for a given migrant and, accordingly, there should be no difference between the number of migrants and the number of migrations.

Identifying the country of current citizenship and the country of birth

If a person holds more than one citizenship, it can be a problem when comparing international migration data. As only a few data sources (such as surveys and sometimes censuses) allow for the collection of information on dual or multiple citizenships, some rules must be followed. The most general of these is that a person holding the citizenship of the country where the information is collected should be considered a national, and other citizenships should not be considered. Nevertheless, this rule may generate some confusion when comparing data between sending and receiving countries, since a migrant with dual citizenship may leave a country as a national of their country of origin (emigration country) and enter another country as a national of that (immigration) country.

When identifying the country of birth, the United Nations recommend to consider the current State borders (UNDESA 2008). Since the information on place of birth usually appears in official documents and is fixed at the time of birth, this recommended definition of country of birth is not easy to implement, particularly in cases when borders have been changed.

The simple classifications of nationals and foreigners (table 3a) and of foreign-born and native-born (table 3b) are often not sufficient to support international migration policies. On the other hand, someone born abroad might also be a national by birth. The usefulness of such classifications can be enhanced by cross-tabulating either (i) the country of birth (born in the country or outside) with the current country of citizenship (whether national or foreigner) or (ii) the current country of citizenship (whether national or foreigner) with the citizenship at birth (born as a national or a foreigner).

Identifying international migration and the relevance of immigrant and emigrant stocks

An international migration is defined as a change of country of usual residence. However, it's impossible for a country to check whether a potential immigrant was a resident in another country before immigration or whether a potential emigrant will become a resident in another country after emigration. Practically speaking, a country can only consider the effectiveness of the residence for a given person in that country and has no way of doing this in another country. Accordingly, the most appropriate definition of an emigration is the one cited in the European Commission *Regulation on Community statistics on migration and international protection* (European Commission, 2007):

‘Emigration’ means the action by which a person, having previously been usually resident in the territory of a Member State, ceases to have his or her usual residence in that Member State for a period that is, or is expected to be, of at least 12 months;

In theory, this definition of international emigration differs slightly from that recommended by the United Nations, which defines an emigrant as someone who leaves their usual country of residence with the intention of staying in another country for at least 12 months so that he/she will be considered a usual resident in the latter country. From a practical viewpoint, a given country can only check if an emigrant is effectively living outside the country for at least 12 months and cannot know not how long he/she stays in every given foreign country where he/she lives. For example, the country of emigration will not be informed if an emigrant lives six months in one country and six months in another. Consequently, this person will be considered an emigrant in the first country of origin rather than an immigrant in either of the two destination countries.

According to the United Nations *Recommendations on Statistics of International Migration* (UNDESA, 1998), the population group directly relevant to the general definition of long-term international migrant is naturally the “stock of international migrants present in the country” that would be composed by all persons “who have spent at least one year of their lives in a country other than the one in which they live at the time the data are gathered”.

In fact, from the viewpoint of a given country, there are two stocks of international migrants:

- the immigrant stock, which is made up of all those who ever immigrated into the country and are currently living in the country (table 3c);
- the emigrant stock, which is made up of all those who emigrated out of the country and are living currently abroad (table 4c).

The term “migrant stock” is often used as a short-cut for “stock of international migrants” but usually only with regard to immigrant stock. This denomination is based on the general agreement that a person who has immigrated at some point will keep the status of migrant all his/her life. That may be prejudicial and not well accepted by all countries or by the population groups concerned.

As for the total population stock, the best data source for enumerating and characterizing immigrant stock is the census, as outlined in the United Nations *Principles and Recommendations for Population and Housing Censuses* (UNDESA, 2008):

2.90. The revised United Nations Recommendations on Statistics of International Migration deal with both migrant flows and immigrant stock, and underscore population censuses as being the best source for collecting data on the immigrant stock and its characteristics. This section is therefore concerned chiefly with the topic of immigrant stock.

2.91. Given the general definition of “international migrant” presented in the revised Recommendations on Statistics of International Migration (para.32), the logical definition of the stock of international migrants present in a country would be “the set of persons who have ever changed their country of usual residence; that is, persons who have spent at least a year of their lives in a country other than the one in which they live at the time the data are gathered”. However, it is common to find that the need for information relates not to the generality of international migrants as characterized above, but rather to population groups such as those who were not born in that country and those who do not have the citizenship of the country where they live.

2.92. Consequently, for the study of the impact of international migration using the population census, two sub-groups of the population represent the primary focus of interest. The first group consists of the foreign-born and the second comprises foreigners living in the country. In order to identify members of those groups, two items must be recorded in the census: (a) country of birth and (b) country of citizenship.

In addition, it is also important to record year of arrival in the country so as to establish length of stay in the country of international migrants.

The United Nations Recommendations on Statistics on International Migration (1998) considered this concept to be “not useful in addressing many of the issues raised in the policy domain”. In fact, as is stressed throughout the United Nations recommendations, “many of the concerns related to international migration are citizenship-specific in the sense that foreigners and citizens do not necessarily have equal social, economic or political rights”. The concept of migrant stock should therefore be considered theoretical and only useful from a conceptual viewpoint.

Consequently, the Recommendations on Statistics of International Migration propose using the concept of citizenship or, alternatively, that of foreign-born when studying the impact of international migration. In United Nations publications and databases, the data on the so-called international migrant stock are based on either country of citizenship or country of birth (UNDESA, 2002, 2005).

Nevertheless, when considering migrants, with a view to developing migration policies, the stock of international immigrants as defined in table 3c would be composed exclusively of foreign immigrants – for example, foreign-born persons living in the country who did not hold the citizenship of that country at birth (whether naturalized or not). The stock of population with a foreign background living in the country is a broader group based on citizenship, defined as all persons who did not hold the citizenship of that country at birth, regardless of whether they immigrated or not. Therefore, the following population groups must be considered among the stock of population with a foreign background:

- foreign immigrants defined as foreign-born persons living in the country who did not hold the citizenship of that country at birth (whether naturalized or not);
- the so-called ‘second-generation of immigrants’ born in the country to foreign citizens who immigrated and not holding the citizenship of that country at birth (whether naturalized or not).²

These population groups may overlap and are not mutually exclusive. However, each group is relevant for different aspects of the migration and integration process and may be the subject of different programmes and policies. The relative size of each group clearly depends on the country, its legislation and its migration history. Changes in the size and characteristics of these groups are largely due to international migration flows and the relevant policies. Maintaining consistency in the classification of international migrants and of the population with a foreign background is therefore essential.

The concept of emigrant stock is not discussed in the United Nations Recommendations on Statistics of International Migration (1998) but the Principles and Recommendations for Population and Housing Censuses (2008) provides recommendations for estimating the number of emigrants living abroad. Nevertheless, several countries introduced in their 2000 round census specific questions aimed at identifying emigrants; such questions were put to emigrants’ relatives still living in the country or, alternatively, to other respondents, such as neighbours, municipality/county authorities, etc.

Scientific support has been provided by the International Union for the Scientific Study of Population (IUSSP) for the analysis of these data (Zaba, 1986). Also, international bodies recently conducted some important studies with a view to improving the data collection on international emigrations and emigrant stocks (UNECE, 2009) and to developing databases on emigrant stocks (OECD, 2008).

The definition of emigrant stock would include those who emigrated from the country for a period of 12 months or more and are living abroad (see table 3c).

For policies aimed at supporting citizens emigrating or returning to their home country, the most relevant emigrant stock would be citizens born in the country who emigrated and are living abroad. Collecting information about the emigrant stock or, more broadly, about all citizens living abroad³ is a key priority for emigration countries, many of which cannot even provide estimates of such stock. Closer global cooperation between countries is required so that such data can be accessed and shared.

² If information on the parents is available (regarding either the country of birth or the citizenship at birth), citizens born in the country, holding citizenship at birth, whose parents (father, mother or both) were born abroad or were not citizens at birth, may also be considered part of the population with a foreign background.

³ The group of citizens living abroad includes not only those included in the emigrant stock but also citizens born abroad who never lived in the country and thus never emigrated.

PART II – DATA SOURCES RELEVANT TO INTERNATIONAL MIGRATION STATISTICS

Different data sources can be used to measure international migration and to identify population groups relevant to international migration. Nevertheless, for West and Central African countries, the censuses remain the main data source and, as such, are considered in more detail hereunder. Other potential data sources include national surveys (such as labour force surveys and household or migration surveys), administrative registers (such as population registers, alien registers and consular registers), other administrative sources (such as residence permits, work permits and asylum applications), and border collection data (relating to visa types, entry or exit cards and passenger surveys).

I. Censuses

Censuses can be a powerful tool for collecting data on international migration. At the most fundamental level, censuses collect information by asking questions of people interviewed. The censuses are usually conducted every 10 years, though this is often not the case in West and Central Africa. Population and housing censuses enumerate the usually resident population of a country and, consequently, they tend to be a good source of information on the number of migrants living in a country at a given point in time (the so-called “stock” of migrants). Some countries have used their census in an attempt to estimate and characterize the emigrant stock – as was the case for Cameroon, Cape Verde, the Democratic Republic of the Congo and Senegal, in their last census. Because of their infrequency, however, censuses are more limited in terms of measuring migrant flows (the number entering or leaving a country in a given time period). Generally speaking, censuses are limited by the number of questions that can be asked, which means that obtaining detailed information on migration processes is usually not feasible. More specific migration surveys are therefore required for the collection of more detailed information on a sample basis.

The census provides a snapshot of the population of a country at a given point in time and may therefore be the best source of data on population stocks with an immigration background. Censuses may also collect data on individuals’ country of birth and country of citizenship, thus providing different possibilities for identifying population groups relevant to international migration. However, since censuses only take into account the movements of individuals present at the time, they do not reflect departures or deaths that may have occurred.

Obtaining reliable statistics on emigration flows is not possible since the movements of persons who have left the country by the time of the inquiry cannot be adequately covered. By addressing questions to a household member on how many members of the household have left or are currently abroad, it may be possible to estimate both emigrant stock and flow. However, such information is likely to result in an underestimation of the emigration that has occurred as there may be no one to report on households that have emigrated in their entirety.

The benefits and disadvantages of using censuses for the collection of data relevant to international migration are summarized in the following sections.

The benefits of using censuses

In theory, the census counts the total resident population, thereby allowing for statistics to be derived on all population groups relevant to international migration, irrespective of their citizenship, country of birth or even legal status. Since international migrants usually constitute only a small proportion of the population of most countries, censuses are often the only data collection instruments that provide adequate information on international migrants despite the risk of under-coverage.

In countries where there is no population registration system, the census is one of the few sources in which all three indicators of migrant origin (country of citizenship, country of birth and country of previous residence) are used simultaneously. It is therefore possible to assess the differences between these criteria. The census collects data on the basic demographic and socio-economic characteristics of individuals, thereby allowing for the cross-classification of migration characteristics with variables such as age, sex, employment, education, and household composition etc. The census also makes available important information on small population groups and small geographical areas, which may be useful in policy development. Given its nature, a population census is particularly important for stock figures, since information on country of birth and country of citizenship are almost always collected. It can also provide data on immigration inflows, when questions relating to *place of residence one year before the census* or *time of arrival in the country* are asked.

The disadvantages of using censuses

Since censuses are carried out only once every 10 years, they cannot capture or reflect rapid changes in international migration. Also, because census questionnaires have only a limited number of questions, they cannot provide detailed information on migrants, particularly concerning the determinants and consequences of migration. Moreover, since censuses never yield an accurate count of a country's population, not all international migrants are reached and respondents' answers may be biased if the interviewers are not well trained.

Censuses can only count immigrants that are still living in the country at the time of the census, thus excluding those that have emigrated before the census date. Attempts to collect data on emigrants are often unsuccessful once these individuals have left the country and any information received from remaining family or household members may not be very reliable.

Censuses are, consequently, more focused on immigrant population stocks than on immigration events.

Criteria used in censuses

Place and country of birth

The United Nations Principles and Recommendations for Population and Housing Censuses, Revision 2 (UNDESA 2008) include the following clarifications regarding place and country of birth:

2.57. Information on the place of birth is a major input to development of policies relating to migration and the related issues of service delivery to migrants.

2.58. The place of birth is the civil division in which the person was born or, for those born in other countries, the country of birth. For persons born in the country where the census is taken (the native-born population), the concept of place of birth usually refers to the geographical unit of the country in which the mother of the individual resided at the time of the person's birth. In some countries, however, the place of birth of natives is defined as the geographical unit in which the birth actually took place. Each country should explain which definition it has used in the census.

2.59. The collection of information distinguishing between the native-born population and those born elsewhere (foreign-born) is necessary where any inquiry on place of birth is made. Even countries where the proportion of foreign-born population is insignificant, which therefore desire to compile information only on the place of birth of the native-born population, must first separate the native-born from the foreign-born population. It is therefore recommended that place of birth be asked of all persons [...].

2.93. The country of birth is the country in which the person was born. It should be noted that the country of birth of a person is not necessarily the same as his or her country of citizenship, which is a separate census topic dealt with below. It is recommended that place of birth be asked of all persons first to distinguish the native-born from the foreign-born population. The collection of this information is necessary even in countries where the proportion of the foreign-born population is small. For the foreign-born population, the collection of additional information on the specific country of birth is recommended so as to permit the classification of the foreign-born population by country of birth. For respondents who are born outside of the country of enumeration and cannot name their country of birth, at least the continent or region where that country is located should be ascertained.

2.94. For purposes of both internal consistency and international comparability, it is recommended that information on the country of birth be recorded according to national boundaries existing at the time of the census. If there have been boundary changes affecting the country of birth of a person, it is important that persons who have remained in the territory where they were born, but whose "country of birth" may have changed because of boundary changes, not be counted as foreign-born because of the failure to take account of the new configuration of the country where they live [...].

Place of birth is one of the most frequently included items in population censuses. For those born abroad, the country of birth should be recorded; for international comparability, the United Nations recommends collecting this information according to national borders existing at the time of the census. However, it is not always easy to do this, for several reasons: the information on place of birth may be known through official documents or administrative records that are not necessarily compiled according to the definitions given above. The persons concerned do not necessarily know their mother's place of residence at the time of their birth, or they may not know about the change of boundaries. While it may be useful to have a full list of the countries of birth, particularly in order to exchange data with neighbouring and other countries of origin, it is difficult to take into account changes in the borders of these countries. Also, the country where a person is currently living and accounted for may have an interest in considering this person as native-born, even if the place of birth is no longer within that country's borders. In such cases, it would be useful to collect data in such a way that the country of birth could be identified according to both current borders and the borders existing at the time of birth. In order to enhance the usefulness of the collected data on the country of birth, this information should be combined with other characteristics such as year of birth, year of immigration, citizenship etc.

The benefits of using this criterion

If the country of birth differs from the country of residence at the time of the census, this is the most direct indicator of international migration, since the person in question has obviously migrated internationally at least once in his or her life. Asking about the country of birth yields valuable information on the origins of respondents as well as on the distribution of the population by country of birth. In most countries, data on the place of residence is among the most straightforward information collected in the census, since most people know in which country they were born.

The drawbacks of using this criterion

When country borders change, it can be difficult to accurately identify the location of the place of residence in accordance with the existing national borders. Also, as people are travelling and migrating more and more frequently, asking respondents to provide their place or country of birth alone is not sufficient: some children may be born abroad because their mother was temporarily abroad as a short-term migrant or just as a traveller. Moreover, a person may have a foreign country of birth as the result of a change of State borders and without having migrated at all. Being born abroad (relative to the existing borders) does not, therefore, always mean

that a person has a different cultural background. However, the fact that the foreign-born population includes very different subgroups makes the analysis of their characteristics more complex.

Country of current citizenship

The United Nations Principles and Recommendations for Population and Housing Censuses, Revision 2 (UNDESA 2008) provides the following definitions and guidelines for this criterion:

2.97. Citizenship is defined as the particular legal bond between an individual and his/her State. A citizen is a legal national of the country of enumeration; a foreigner is a non-national of the country (that is, a citizen of another country). Because the country of citizenship is not necessarily identical to the country of birth, both items should be collected in a census.

2.98. Additional information on citizenship could be collected so as to permit the classification of the population into (a) citizens by birth; (b) citizens by naturalization whether by declaration, option, marriage or other means; and (c) foreigners (citizens of another country). In addition, information on the country of citizenship of foreigners should be collected.

The benefits of using this criterion

In terms of migration policy development, the distinction between the national and foreign population is usually one of the most important factors. Also, for many countries, citizenship is one of the most readily available data on individuals' backgrounds. It is also often recorded (at least for adult persons) in administrative documents. As far as legal immigration is concerned, citizenship is the main distinguishing characteristic. Normally, national citizens have the unconditional right to enter and live in the country, whereas foreigners are subject to specific conditions related to their citizenship. While citizenship cannot be used as a criterion for identifying migrants, it is useful in assessing migrant integration and the effects of differential rights due to foreign status.

The drawbacks of using this criterion

If a person holds the citizenship of a foreign country, it does not necessarily mean that he or she was born in that country. On the other hand, foreign citizens by birth (both those who are born in the country and those born abroad) may, at the time of data collection (census), have been granted the citizenship of that country of residence through naturalization. In this case, the information on the foreign origins of such individuals is not revealed. The fact that some persons may hold more than one citizenship can further complicate the issue. What is important, however, is whether or not a given person holds the citizenship of the country concerned.

Duration of residence and year/period of arrival in the country

The United Nations *Principles and Recommendations for Population and Housing Censuses* (UNDESA 2008) defines this criterion as follows:

2.64. The duration of residence is the interval of time up to the date of the census, expressed in complete years, during which each person has lived in (a) the locality that is his or her usual residence at the time of the census and (b) the major or smaller civil division in which that locality is situated.

2.65. In collecting information on duration of residence, it should be made clear that the concern is with length of residence in the major or smaller civil division and the locality, but not in the particular housing unit.

Using this criterion, it would be impossible to capture the duration of residence in the country since the last immigration occurred, as the immigrants may have had several places of residence in the country after arriving from abroad and, in this case, details of any international immigration would be hidden. Only by asking about the year of (last) arrival in the country would this information be revealed.

2.103. Recording the calendar year and month of arrival of a foreign-born person to the country of enumeration permits the calculation of the number of completed years between the time of arrival in the country and the time of inquiry, usually the census date [...].

2.104. It is possible to collect information on the date of first arrival in the country or the date of the most recent arrival in the country. Each has its own advantages and disadvantages. In making the choice of which information to collect, countries should be guided first and foremost by their policy needs.

2.105. Note that information on the year and month of arrival is focused mainly on persons born outside of the country of enumeration, that is to say, persons who must have arrived in that country at some time after their birth. However, countries having experienced important emigration outflows [...] may have an interest in collecting information on returning migrants: in this case, the question on year and month of arrival could also be asked to native-born respondents.

The benefits of using this criterion

This question allows for the identification of immigrants that arrived during the last year – information that may provide a good estimate of the annual immigration flow into the country.

The question also yields information about immigrants' length of stay in the country and enables interviewers to distinguish between recently arrived immigrants and those who are there for a longer period (e.g. for more than five years), which may be appropriate for the development of integration policies.

The drawbacks of using this criterion

This question must be combined with the next, regarding place of previous residence (abroad), in order to determine the time and location of the last migration. Consequently, two questions need to be asked in order to obtain data on international immigration.

Place of previous residence

2.67. The place of previous residence is the major or smaller civil division, or the foreign country, in which the individual resided immediately prior to migrating into his or her present civil division of usual residence.

2.68. Data on the place of previous residence have only limited value in themselves because they do not provide information on the time of in-migration. Therefore, when the topic is investigated, the duration of residence should also be investigated, if at all possible, so that the data can be cross-classified.

As for the duration of stay and the year of arrival, this question is not useful in terms of international migration, since the country of previous residence will only be captured if the person concerned did not move within the country after immigrating from abroad. Nevertheless the relative distribution among the different countries of previous residence for those whose previous place of residence was abroad may be considered as not biased.

The benefits of using this criterion

The relative distribution among the different countries of previous residence may be determined by considering only those with place of previous residence abroad.

The drawbacks of using this criterion

Even if respondents are asked about the duration of stay in the country or the year of arrival, in addition to being asked about the place of previous residence, no useful information on international migration will be obtained as the country of previous residence will only be revealed if the person did not move within the country after their last international immigration.

Place of residence at a specified date in the past

2.69. The place of residence at a specified date in the past is the major or smaller division, or the foreign country, in which the individual resided at a specified date preceding the census. The reference date chosen should be that most useful for national purposes. In most cases, this has been deemed to be one year or five years preceding the census (or both of these time frames in cases where internal migration is of particular importance to users and resources are sufficient to code the data). The former reference date provides current statistics of both internal and international migration during a single year, while the latter may be more appropriate for collecting data for the analysis of international migration. Also to be taken into account in selecting the reference date should be the probable ability of individuals to recall with accuracy their usual residence one year or five years earlier than the census date. For countries conducting quinquennial censuses, the date of five years earlier can be readily tied in, for most persons, with the time of the previous census. In other cases, one-year recall may be more likely than five-year recall. Some countries, however, may have to use a different time reference than either one year or five years preceding the census because both of these intervals may present recall difficulties. National circumstances may make it necessary for the time reference to be one that can be associated with the occurrence of an important event that most people will remember [...]

This criterion, unlike the previous one, is designed to capture both those who were living elsewhere in the country and those who were living abroad at a given moment in the past. There are pros and cons to using this criterion and to choosing a time frame.

The benefits of using this criterion

The question is very direct and concise, concretely determining the respondents' place and time frame of residence. It allows for the stock of persons who recently immigrated to the country to be identified as they would have been living abroad at the time of reference. It also allows for an estimation of the number of international immigrants in the period between the date of reference and the census date. These international immigrants may be characterized by other variables collected in the census.

The drawbacks of using this criterion

The reliability of the answer to the question depends on the respondents' memory: some periods of residence outside the country may be omitted and the place of residence at the exact time in question may not be remembered.

The question does not allow for the precise date of immigration or even the exact country of origin to be identified, as immigrants may have previously been residents in another country and accordingly the last country of residence may be hidden. International immigration flows may be estimated for the period

between the reference date and the census date but such flows will be underestimated if the person who immigrated during that period died or emigrated or, in cases where the period of reference is more than one year, if the person migrated internationally more than once.

There is also the potential for overestimation – for example, if someone occasionally went abroad (for less than 12 months) and was therefore not present on the reference date, he or she should not be counted as an international migrant. The same applies if the date of reference is one year ago and the respondent claimed to be abroad at that time and had no intention of staying 12 months in the country.

Since this question relates to a fixed time frame and queries only the location, there are pros and cons to choosing “one year ago”, “five years ago” and “at the time of the last census”, as follows:

- since respondents are more likely to remember fairly recent events, the reference period of “one year ago” tends to yield more reliable results;
- more immigrants are likely to be identified if the duration is longer – “five years ago” or “at the time of the last census”;
- using “at the time of the last census” does not allow for international comparisons but may reveal important changes in the population between censuses;
- using “at the time of the last census” allows for an analysis of the population growth between the two successive censuses;
- the “five years ago” option is the most suitable for projection purposes if the projection exercise is based on age groups categorized in increments of five years;
- using the “one year ago” option will yield the best estimate of annual migration flows, whereas using “five years ago” will underestimate the average number of annual migrations in the last five years as some migrants will migrate more than once, while others may have died or emigrated before the census took place.

Specific questions in order to capture emigrants

Even though the UN census recommendations (2008) did not recommend including questions in order to measure emigration flows, several countries introduced an emigration module in their census questionnaire. Four of these are West and Central African countries: Cameroon, Cape Verde, Democratic Republic of the Congo and Senegal.

Usually, information is collected on people who are absent for more than a certain minimum period. However, only a few details can be collected and the information refers only to a subset of emigrants. Moreover, since the data collection is often meant to cover persons who are temporarily absent, the data can be interpreted in various ways. Questions that would be useful to consider in an emigration module are listed in textbox 1.

Textbox 1: Specific questions to include in census questionnaires in order to capture emigrants

The emigration module consists of the following three questions and a simple table of information that is completed according to the responses given:

Question 1: Has any member of the household emigrated in the last x years?

Question 2: Has any former member of the household (i.e. any person who, at the time of the census, was no longer living in the same dwelling of the household being enumerated) emigrated in the last x years?

Question 3: Did this person set up his or her own household or form part of another household that emigrated in its entirety in the last x years?

Information table: collect name, age in years, sex, country of destination and year of departure for each emigrated person.

Source: Cantisani, G. et al. 2009.

The benefits of asking specific questions relating to emigration

These questions offer the possibility of collecting information on persons who were not enumerated at the time of the census but were, in the past, members of a given household and left the country in the last x years. The questions also allow for emigrants to be characterized by age, sex, country of destination and, if requested, other socio-economic characteristics. This is the only way to collect information on emigrants without relying on data collected by migrant-receiving countries.

The drawbacks of asking specific questions relating to emigration

Even if the information is accurately collected, it is likely to result in an underestimate of emigration levels because there will be no one to report on households that have emigrated in their entirety. In such cases, neighbours or local authority representatives may be questioned but their answers may not be complete or well informed. Moreover, persons who have been gone for some time may no longer be considered household members. On the other hand, some emigrants may be double-counted – for example, a married couple who emigrated may be reported by both of the spouses' families. In general, therefore, proxy responses are unlikely to be as detailed or accurate as responses given directly by the persons concerned.

It might be more reliable to systematically ask about the place or country of residence of either:

- all the siblings of persons enumerated in the census, or of a sample or age-specific subgroup of these enumerated persons;
- all living offspring of mothers older than a given age (see textbox 2).

Textbox 2: Recommended questions to be asked in the census to females aged 14 to 65

- Question 1: How many children have you had? (list name, sex and year of birth)?
- Question 2: Is each child still alive?
- Question 3: What is the current place or country of usual residence of each child?

The International Union for the Scientific Study of Population (IUSSP) has developed a special methodology for analysing the answers to such questions in order to estimate the level of emigration flows and the characteristics of emigrants (Zaba, 1986 and 1987; IUSSP, 1981).

2. Other data sources

Sample surveys

Sample surveys are designed to collect data from a limited number of persons who are considered to represent the population as a whole. Because only a sample of the population is interviewed, sample surveys are much less costly than a population census and can be conducted more frequently. As with the census, the advantage of household surveys is that international definitions can be used and the questions designed to meet user needs, allowing for more flexibility in the number and types of questions that can be asked.

The sample survey can be used to derive general information on foreigners and on persons who immigrated between censuses, if questions on country of birth, citizenship, citizenship at birth and/or parents' country of birth are included. When criteria such as "place of residence one year before" and "year of arrival in the country" are included, partial estimates of recent immigration flows can be obtained.

The main limitations of the sample survey relate to the time frame, design and size of the sample, and the fact that some population groups, such as recent migrants, cannot be reached. Compared to the census, sample sizes are relatively small and the surveys tend to be voluntary, leading to both sampling and non-sampling errors. Obtaining reliable data on foreigners may also be difficult due to some respondents' poor proficiency in the host country language.

In order to correctly measure both immigration flows and population stocks relevant to migration, the following guidelines should be used:

- ample frame should be regularly updated to take into account newly arrived immigrants and to exclude persons who have left the country;
- sample design should ensure that population subgroups and areas particularly relevant to international migrations are taken into account;
- since migrants represent a relatively small share of the total population, the sample size should be large enough to ensure statistical significance, particularly when estimating specific migration flows and population stocks.

Compared to the cross-sectional surveys conducted at one point in time, like censuses, longitudinal surveys are more suitable for tracking migration processes over time, but they are more difficult to organize than cross-sectional surveys, which can also measure historical data by asking retrospective life-history questions.

Household surveys are increasingly being used to estimate immigration (flows and stocks) and emigration (actual, intended or return), particularly in countries where other sources for regular/annual data are non-existent. Household surveys are carried out frequently – in many cases, annually – and they generally aim to cover the total resident population, thus including all population groups relevant to international migration. However, in many countries, people living in group homes or institutions, such as nursery homes and refugee camps, may not be covered.

General household surveys have the advantage of generating a wealth of information on migrants' socio-economic characteristics, using only a few questions on migration. More specialized household surveys focusing on international migration constitute the most appropriate way of collecting data for studies of the determinants or consequences of international migration.

Passenger surveys are designed to collect data specifically on migration and/or tourism at national border gates. These surveys are best suited to countries where entry and exit points are controlled and the number of these points is relatively limited. The major problem with these surveys is that, with large numbers of passengers, the number of international migrants in the sample is relatively small, which can lead

to significant sampling errors. Since migration is determined when a traveller arrives in or departs from a country, the data reflect travellers' plans to stay in the country or abroad. A detailed account of the problems of using passenger surveys is provided in the ILO Guidelines (Bilsborrow, R. et al., 1997).

Multi-purpose surveys are also sometimes used to collect data on migration. However, compared with specialized migration surveys, the amount of information requested is restricted due to the risk of overburdening respondents and affecting their response rates. For West and Central African countries, the use of surveys to collect information on international migration and population groups relevant to international migration is discussed by Schachter (2008).

The benefits of using sample surveys

Like population censuses, sample surveys are good sources of information on the characteristics of the population – provided the sample is sufficiently representative of the population groups relevant to migration. The most important advantage of this kind of survey is the possibility of including more questions on both persons and household members, with a view to identifying and characterizing migrants. Unlike censuses, sample surveys can collect migration data retrospectively. Some information on emigrated household members can also be collected, as can information on remittances sent to members of the households living in the country.

The drawbacks of using sample surveys

Since migrants account for a relatively small share of the total population, sampling the overall population usually does not cover an adequate proportion of the relevant population group. In order to collect sufficient data on migrants, therefore, more focused and specific sampling procedures must be used.

Administrative data sources

Border data collection systems

Most countries operate a system of border controls that include the gathering of administrative or statistical data from travellers entering and/or departing the country. For administrative data, the status of persons arriving and departing is established on the basis of documentary evidence (passports, visas, residence permits and so forth). Statistical data are gathered via standardized forms (arrival and departure cards) filled in by arriving and departing passengers.

Passenger cards (or border cards) are for the collection of data on all departures and arrivals – nationals and non-nationals alike – through international borders. However, this system obviously cannot generate data on stocks of immigrant or foreign populations residing in the country. Nor can it provide good data on migration flows, unless the majority of border crossings take place through official entry points. Moreover, it is important that administrative systems be able to distinguish between international migrants and all other international travellers, which is usually only possible if the system can match individual registrations at successive points in time and at different locations. Such systems are effective under specific geographical conditions and with extremely developed administrative systems. However, in many cases, the porosity of State borders hinders their effective implementation.

International recommendations for identifying migrants at the border focus on changes in the country of usual residence as the key factor in distinguishing migrants from other travellers. The United Nations recommends gathering the following information: intended duration of stay; country of (usual) residence; country of citizenship; and purpose of stay. The intended duration of stay in the country of destination is one of the key pieces of information in distinguishing migrants from other travellers and long-term migrants from short-term ones. In the case of foreigners, declared intentions may be checked against the validity of visas

or permits. For arriving citizens, information on intended duration of stay in their own country provides the only means of identifying among them long-term incoming migrants if their duration of absence was at least 12 months.

Obtaining information on the purpose of stay is one way of identifying the various categories of travellers. The United Nations strongly recommends that international migrant foreigners be classified according to the reason for their admission, as established by the receiving State (the intentions, desires or expectations of the migrant foreigner involved should not be the basis for classification). Departing citizens may be classified either according to the formal reasons for their admission by the receiving State or according to their own stated purpose for staying abroad, with the latter clearly being more practical.

Textbox 3: Building a border-crossing database

A methodology developed and tested in Lebanon under the MEDSTAT II project (Cantisani et al., 2009)

All border crossings must be recorded by date, identification characteristics of the persons concerned and distinction between entries (IN) and exits (OUT).

All border crossings for the same person are linked and recorded with basic characteristics such as sex, date of birth, country of citizenship, number of passport and, if available, country of birth. The linkage can be made using the passport number, the country of citizenship, sex, name, surname and date of birth. In some countries, the direct link between a given entry and subsequent exit is made when the person leaves the country and the same identification number is attributed to that person.

Special attention must be paid to the completeness and reliability of reconstructed personal histories, as far as border crossings are concerned. A validation phase is essential as for reason of imperfect linkage the same person may be involved in two or more reconstructed personal histories, which would lead to an overestimation of the number of international migrants.

Source: Extracted from Poulain, 2008.

Textbox 4: Identification of international migrants according to the Lebanon methodology (MEDSTAT II project)

An international immigrant is a person:

- who crossed the border and entered the country and has cumulated a minimum of 183 days of residence in the country during the 12 following months;
- who was not a usual resident of the country when entering the country, which means that he/she spent at least a total of 183 days of residence outside the country during the 12 months before entering the country.

An international emigrant is a person:

- who crossed the border and left the country and was resident for a minimum of 183 days outside the country during the 12 following months;
- who was a usual resident of the country when leaving the country, which means that he/she spent a total of at least 183 days of residence in the country during the 12 months before leaving the country.

Source: Extracted from Poulain, 2008.

In order to reduce the data collection load at the border and/or the data processing load, some countries collect data from a sample of passengers only. Other countries collect data only from certain categories of passengers, such as foreigners or temporary visitors, while countries with long land borders sometimes limit themselves to collecting data from passengers at air- and seaports only. However, such simplifications affect the reliability of collected data.

The benefits of using border data collection systems

Even if the data collected at the border are primarily intended for entry control purposes, extending the border data collection system to provide information on international migration can be achieved with relatively limited effort and cost.

Border data reflect actual moves and are therefore, theoretically, good sources of data on all immigrations and emigrations. All arriving and departing migrants can be counted, although with a limited number of characteristics. If border controls are exhaustive at all border points and in both directions (entry and exit), net migration figures for the country as a whole can be calculated. Nevertheless, the resulting figure is generally unreliable and tends to overestimate the net migration as entries are usually more accurately registered than exits.

The drawbacks of using border data collection systems

The number of persons crossing State borders is usually many hundreds or thousands times greater than the number of migrants crossing borders. Consequently, it is usually only possible to ask a few migration-related questions at border controls or in border surveys. Moreover, as only minimal verification of the cards filled in by the travellers is possible, the information gathered may not be very reliable.

Migration questions, if included, are likely to reflect the conditions on entry – for example, on intended length of stay and purpose of visit. It is unlikely that foreigners requested to report their intended length of stay would state that it is longer than that allowed by the visa or permit they hold. The same would apply to the purpose of the visit: someone holding a tourist visa is unlikely to report that the purpose of the visit is actually work/employment.

Not all the collected information is recorded or processed and it may not be available in a useful form, such as on an electronic database.

Residence permits

The authority issuing permits to foreigners can usually provide information on immigration flows and stocks of foreigners in the country. The population universe is the legal non-national population entitled to live in a country on the basis of a residence permit but foreigners, for whom a residence permit is not required, are excluded.

The reason for registering residence permits is to store information on the legal right of foreigners to live in the country, rather than on their movements. Consequently, the departure of foreigners is usually not registered. Even so, based on permit expiry dates, emigration flows can be estimated. However, since no data are provided on the next country of residence, such information can only be determined via other variables, such as country of citizenship or country of birth.

When using data derived from the issuance of residence permits, due attention should be paid to existing regulations on entry and length of stay in the country, since this would affect the resulting statistical data. Problems may also result from non-arrivals, early departures or double counts due to the issuance of multiple permits. Nevertheless, even if only a specific sub-groups of immigrants is covered, the residence permits can represent an important source of information on migration flows.

The administrative databases that compile all the information on permits are an important source of various statistics on international migration. This importance derives from the good coverage, the limited costs and the availability of data – often in electronic format. Therefore, in spite of several limitations – for example, irregular or unreliable registration of definitive departures or emigrants; delays in renewing permits; limited registration or lack of coverage of selected categories such as minors and undocumented migrants –

this type of data source can be used to estimate several basic indicators, such as the stock of foreigners, new immigrants, and changes in status.

Nevertheless, some conceptual and methodological issues need to be resolved before producing comparable measures based on this data source – for instance, how to define how and when a person receiving a first permit is subsequently classified as a migrant on the basis of residence permits issued, and how to differentiate short-term migrants from long-term migrants. However, greater cooperation between national statistical institutes and the ministries of the interior who administer and maintain the permit systems appears to be the most important prerequisite for the development of this data source.

The use of residence permit databases as a source of regular statistical data in developing countries has been limited and there is a need to enhance the capacities of national statistical institutes to measure migrant flows and stocks from these sources. Some countries record the presence of foreigners fairly comprehensively, using their residence permit systems and quite advanced technical infrastructures. Others require that residence permit holders temporarily leaving the national territory notify them of their departure – an important variable when analysing the data for statistical purposes.

Textbox 5: South-Africa's experience in the use of administrative databases

South Africa uses residence permits, work permits, and border collection data (entry/exit forms) to measure migration. Data are collected and processed by the Department of Home Affairs (DHA), and then a subset of variables are sent to Statistic South Africa (SSA) for analysis. South Africa is the only country in Southern Africa with a central computerized administrative records system. Immigration is measured by analysing those who have been granted residence permits. For permanent residents, data are available by sex, age, occupation, country of birth and citizenship, and country of previous residence. In addition, inflow and outflow of foreigners and non-nationals is tabulated using transit visas and temporary residence permits. There are many different types of permanent and temporary residence permits, including work, study, and asylum permits.

Using these data, foreigners can be categorized as employment-based or permanent migrants. Country of birth and citizenship data are used by SSA to measure international migrant stock, but place of usual residence and duration of stay are not used. Migrants are not categorized as long-term or short-term, since duration of stay information (based on date of permit expiration) is deemed unreliable, though there have been proposals to measure this directly using individual arrival and departure data.

As with any administrative records-based system, a number of problems exist for measuring migration. The most basic problem is that administrative records data are not collected for the purposes of measuring migration, and the organization collecting the data is not the same as the organization analysing them. In addition, travellers at border points need to be processed as efficiently as possible, to avoid long delays, and collecting detailed data can therefore be impractical. Improved communication and cooperation between DHA and SSA is critical to improving these processes. Other problems include incomplete coverage, especially with regard to irregular migrants (or those who use unofficial entry points), inaccurate responses, and staff workload issues. However, once the new centralized computerized system is functioning properly, the quality of migration data from these sources should improve.

Source: Extracted from Schachter, 2009.

The benefits of using residence permits for data collection

Coverage of foreigners is usually exhaustive. Data collected upon issuance of residence permits may allow for good estimations of foreign migrants if the following conditions are met: first issue and renewals are distinguishable; date of issue and date of expiry can be compared to compute the cumulative duration of authorized stay in the country. The UN definition of a long-term migrant can be implemented in terms of the 12-month criterion but only for foreigners needing a residence permit. Emigration estimates may also be possible, based on expired residence permits (without renewals).

The drawbacks of using residence permits for data collection

The issuance of a permit does not necessarily mean that the applicant will immigrate or that, if he/she does immigrate, the date of issue will be the same as the date of immigration. Moreover in some countries, due to administrative regulations, a first permit may be issued to a person already living in the country but receiving a new permit with a different purpose of residence.

Only the international migrations of foreigners needing residence permits can be identified using residence permit databases.

Population registration systems: population registers, aliens registers and registers of citizens living abroad

Population registration systems covering the whole population, including central or local population registers, can be considered the most appropriate sources of data on both migration flows and migrant populations. Both nationals and non-nationals with a valid residence permit, as well as also non-nationals under free movement agreements, are included in the population universe. In principle, registers keep track of all vital events and changes of residence, thus ensuring a continuous update of individual records and, consequently, a supply of up-to-date information on the population. Continuous recording of the place of residence in the register allows for all registered movements to be identified.

The population registration system has an advantage over other administrative data sources in that it covers the legal resident population and all their registered changes of residence exhaustively. It can therefore provide data on both migration flows and migrant population stocks. In most population registration systems, all three aspects of migrant origin (country of citizenship, country of birth and country of previous residence) are used simultaneously. Information is collected at the individual level, thus allowing for the cross-classification of migration characteristics with basic demographic variables such as age and sex. Information on small population groups and small geographical areas is also made available. Moreover, continuous data collection means that fresh data can be extracted from the register annually or even more frequently.

Reliable population registers are powerful statistical instruments: they are like continuous censuses, they provide migration flow data, and using them for statistical purposes is cheaper than conducting specific statistical operations such as censuses and surveys.

In spite of these major statistical advantages, there are some limits and constraints to using these data sources. Firstly, the State must set up a specific administrative unit to maintain such a system. Ideally, all public agencies should base their activities on reliable population registers in order to develop effective administrative registers. These registers must use standardized identification numbers and standardized variables in order to facilitate exchanges. Legally linking administrative databases for the exchange and transfer of data is essential to improve reliability and statistical use. Even if these technicalities are resolved, the quality of data depends on whether or not inhabitants report their migrations and the level of confidence between the population and the State (which may be low due to historical misuse of population registers). Historically, the lack of an efficient system of information exchange between municipalities and other administrations has resulted in frequent double counts or inconsistencies. In addition, coverage of the population is restricted to the de jure

population. Finally, registration of emigrations is often deficient due to the lack of incentives for emigrants to declare their departure and the existence of advantages linked to registration (such as social benefits, residence permits, etc.).

In some countries, a dedicated register, called an alien register, records all foreigners living in the country. This kind of register can be an independent system or part of the population registration system, and it is usually fed by collecting information on individuals and relevant events from different administrative databases, such as issuance of residence permits and registration of vital events. This kind of register can provide accurate and detailed information on non-nationals with a valid residence permit, but it can also include similar information on non-nationals under free movement agreements. Similar to population registration systems, alien registers can be used to identify migrations and population stocks but only those relating to foreigners.

To some extent, alien registers, like population registration systems, depend on the accurate registration of individuals. However, links with administrative procedures and more strict administrative rules on the registration of foreigners usually ensure good coverage of legal immigrations and the stock of foreigners living in a country. Nevertheless, data derived from alien registers can result in both under- and overestimates. Underestimates mainly relate to immigrations under free movement agreements whereby the registration rules are softer – for example, based on self-declaration only, while overestimates relate to the unrecorded emigration of foreigners recorded in the alien register.

When specific foreign citizens are required to have work permits before being allowed to work, the number of new work permits issued may be used to estimate labour immigration. Work permit data are often published, but interpretation is problematic due to the high number of exceptions. If a country's social security system is well developed, the registration of immigrants in the database can be used to measure specific categories of immigrants and foreign workers.

With regard to foreign population stocks, persons acquiring the citizenship of the host country are usually deleted from the alien register.

In some countries, where emigration is or has been significant and has been supported by the government, data on the emigration of nationals are collected in dedicated databases, such as registers of nationals living abroad or consular registers. Such registers can be a source of data on the emigrations of nationals as well as on the stock of nationals living abroad, if demographic changes (such as marriage, birth of children, death, etc.) are reported to the consulate; the data would also include information on emigrants' descendants and the diaspora.

However, since these registration systems are based on voluntary self-declaration, they are only effective as data sources if registration benefits the persons concerned. Some countries encourage their citizens to report their place of residence in foreign countries by promising them concrete help in the event of a disaster or if they wish to return to their home country. They might also stipulate that expired documents can only be replaced abroad if the person in question has declared his or her place of residence abroad. Often, such databases are checked at election time. Informing persons (emigrants and potential emigrants) of the benefits of being recorded in consulates is the most effective way to populate the databases. However, consulate databases of expatriates cannot be expected to cover all persons originating from the country in question, particularly second and later generations of emigrants whose links to the country of origin may become weaker over time.

Consequently, this data source is likely to both under- and overestimate the stock of nationals living abroad, since the deaths of nationals occurring abroad are often not recorded.

Nevertheless, consular registers may be very useful in emigration countries such as those in West and Central Africa, in terms of building a database of nationals living abroad. If appropriate incentives are

introduced, such databases can cover a significant proportion of nationals who were born in the country and emigrated. Coverage of nationals' descendants and other members of the diaspora is, however, more questionable. The best sources of data on the diaspora in a given country are the censuses and/or any detailed surveys carried out by the host country to identify the diaspora. Unfortunately, such data are not currently collected on a strictly comparative basis in all countries where emigrants are living.

The benefits of population register systems

- exhaustive coverage of the legally resident population and of registered changes of residence;
- continuous data collection so that data are available annually or more often;
- they contain the main demographic characteristics of international migrants;
- they may provide information on return emigration (past immigrations) or emigration to the country of origin of parent(s).

The drawbacks of population register systems

- statistical data collection is not a priority: definitions, coverage and availability depend on legislation and administrative rules;
- some personal advantages/disadvantages – mostly financial ones – linked to the deregistration of the place of residence in the country of departure could have a significant influence on the level of coverage of emigration events;
- emigrations of persons not registered in the system are not covered;
- the list of socio-economic characteristics is limited in reference to the related legislation;
- the time lag between registration and a migration event can be significant;
- stock data on nationals/native-born persons living abroad can be overestimated (due to deaths of emigrated persons not being recorded in the register) or underestimated (due to emigrations or nationals born abroad not being recorded in the register).

Despite these drawbacks, the development of a centralized population registration system is highly recommended in West and Central African countries. Given the experience of European countries, however, it is unlikely that such a system will be a potential data source on international migration in the near future.

3. Relevance of data sources

The various statistical data sources are presented below in table 4 with a view to demonstrating their relevance when producing data on international migration and relevant population groups. Migration data come from a variety of sources not always specifically designed for migration-related data collection and analyses. They are collected by different bodies and some are for statistical reasons while others are for administrative purposes. Table 4 depicts the general availability of data on migration flows and migrant population stocks according to source typology.

Often, the same data source supplies data on emigration and immigration flows, since the characteristics for defining them are generally the same. However, all existing data sources, including administrative sources, are usually able to cover immigration better than emigration. Censuses and sample surveys cannot provide comprehensive coverage of migration flows or supply data on emigrant populations abroad but they can supply good data on population stocks relevant to immigration.

Many countries report difficulties collecting data on emigrants and some countries do not collect any information at all. Even for countries with fairly reliable migration statistics, emigration continues to be one of the most difficult components to collect data for. As emigration data are less often available than immigration data, countries may consider the option of using immigration data from receiving countries to produce or improve emigration data. However, despite the difficulties of collecting data on emigration flows, emigration data collected by a country have several advantages over data on the same flows recorded in destination countries.

Table 4: Availability of migration data by source type

	Flow data		Population stocks	
	Immigration	Emigration	Immigrant	Emigrant
Population census	X	(x)	X	(x)
Household or individual-based sample survey	X	(x)	X	(x)
Passenger cards or registration of border crossings	X	X	–	–
Border passenger survey	X	X	–	–
Population registration system	X	X	X	(x)
Alien register	X	X	X	–
Residence permits	X	(x)	X	–

Notes: X Source theoretically covers migration flows and/or stocks on all or specific population groups.

(x) Under certain conditions, some data can be derived but significant coverage errors are expected.

– Source does not supply data.

If national data are produced for both immigration and emigration flows, the same time criteria can be used to define immigrants and emigrants, and the population change can be calculated on the basis of harmonized definitions. Since the same data collection methods and methodology are usually used for many years, data can be compared over the long term. Moreover, even if national data are affected by under-coverage or exclusion of specific groups of emigrants, they can be adjusted accordingly and readily defined.

Nevertheless, each data source is in some way limited with respect to its coverage of migrations or migrant stocks. These limitations are due to the multiple purposes that the data sources have been designed to serve. Data on both immigration and emigration flows are highly variable and their accuracy depends on how complete the coverage of self-declared migration is. In addition, there are no universally applied standardized or harmonized concepts of migration, despite the continued efforts of the United Nations and other international bodies to promote the harmonization of international migration statistics. Last, but not least, most migration data are derived from a country's administrative records and therefore strongly reflect that country's policy on migration.

PART III – DATA COLLECTION IN WEST AND CENTRAL AFRICA: ASSESSMENT AND RECOMMENDATIONS

Considering all these potential data sources, the situation in the West and Central African countries is assessed and concrete recommendations are proposed with a view to generating reliable and comparable data that can be used to support effective policy development. Most of these recommendations were presented recently in a report released by the Commission on International Migration Data for Development Research and Policy entitled, *Migrants Count. Five Steps Toward Better Migration Data* (Center for Global Development, 2009). The Commission recognized that the United Nations has made these recommendations consistently for some time but that full compliance is still a distant goal for many countries, including those in West and Central Africa.

Recommendation 1: Introduce questions in the census to collect information on international migration

These questions were discussed in the second chapter of these guidelines and table 5 hereunder presents the different variables covered in the most recent census in West and Central African countries in order to collect information on international migrations and populations with a foreign background.

As shown in table 5, the question on citizenship has been asked in all West and Central African countries. In some of these, the questionnaire also includes a question on ethnicity but only for nationals. Mixing the concepts of citizenship and ethnicity may confuse respondents and, in addition to the sensitive character of ethnicity, increase the level of non-responses. Accordingly, it would be preferable in the next census questionnaire for these two questions to be clearly separated and very precise instructions given to enumerators in order to avoid large numbers of persons indicating only their ethnicity and ignoring the question on country of citizenship. It may also be useful to ask about a possible second citizenship, as the number of persons with dual citizenship is increasing.

The place and the country of birth are asked in all countries. Obtaining this information in accordance with current country boundaries, however, is not easy, particularly for persons born in a place that is no longer their country of current residence. Responses to this question can be checked against administrative documents recording the place of birth but such documents usually refer to the boundaries at the time of birth. For exchange of data with other countries, a detailed list of countries of birth should be considered.

As explained earlier, asking about the place of previous residence, the duration of stay or the year of arrival in the census is not useful when collecting data on international migration: all international immigrants who changed their residence within the country after their latest arrival from abroad will be ignored because they will have been registered as internal migrants. Accordingly, only those international immigrants who did not subsequently change their residence in the country are counted, resulting in an underestimation of the level of international immigration.

Table 5: Variables relating to international migration, covered in recent censuses in West and Central Africa (the number or code of the question on the census form is indicated below for each relevant variable converted in the census)

Country	Year	Citizenship	Place of birth	Previous residence*	Duration of stay*	Year of arrival*	Residence x years ago	Part on emigration
Cameroon	2003	14	7	-	13	-	5 years Last census (1987)	special section
Cape Verde	2000	P07	P08	P09	P10	-	-	section I
Côte d'Ivoire	1998	20	19	21		-	1 year	-
Democratic Rep. of the Congo	2009	P14	P09 (sec.8)	P11 (sec.8)	-	P12 (sec.8)	-	section VI
Ghana	2000	P04	P06	P08	-	-	5 years	-
Mali	1998	P9	P8	P13	-	-	-	-
Mauritania	2000	Q8	Q12	Q11	Q10	-	-	-
Niger	2001	C07	C05	C09	C10	-	-	-
Nigeria	2006	6	7	11	10	-	-	-
Senegal	2002	B10	B07	B09	-	-	5 years	section D

Note: * indicates that previous residence may be inside the country or abroad and, if so, information on previous country of residence is unavailable.

The best question for capturing information on international immigrants in censuses is that on the place of usual residence at a fixed time in the past. The question about place of usual residence five years ago was asked in the last census of Cameroon, Ghana and Senegal, while Côte d'Ivoire asked the same question but with a reference date of one year ago. We recommend that all countries use the question on the place of usual residence five years ago, with a detailed list of countries to facilitate data exchange with other countries.

Four West and Central African countries introduced an emigration module in their census in the last five years, collecting information on the characteristics of emigrants. We recommend that a standardized emigration module be elaborated and introduced by all West and Central African countries and that a comparative analysis of the data be carried out to improve the data's usefulness. Moreover, as all countries are introducing questions on fertility and infant mortality to all females aged 14 and over, we recommend adding a question on the place or country of usual residence of all surviving offspring.

Because the 2010 round of censuses is already under way, ensuring that these questions on international migration are included in the future censuses of all West and Central African countries is an urgent priority. The Commission on International Migration Data for Development Research and Policy, established by the Center for Global Development (CGD) has made this the first recommendation, arguing that the opportunity to affect this process will not come again for another decade.

Recommendation 2: Publish, disseminate and analyse the census results and produce detailed metadata

To make sound policy decisions, accurate data are necessary. Like most other developing countries, the West and Central African countries face a number of challenges in the dissemination of reliable international migration data.

The second essential recommendation is to publicly tabulate census data, once collected, and to disseminate it in a detailed and speedy fashion. According to the CGD Commission's recommendations, the essential census-based tabulations that each country should publicly disseminate are country of birth, country of citizenship, and country of previous residence (1 or 5 years ago), tabulated by (1) sex, (2) age and (3) level of education.

Production and dissemination of these simple tabulations via the Internet would be quick and the data should be available free of charge. Bearing in mind the importance of data sharing with sending and receiving countries, detailed lists of countries should be available, as should detailed metadata. More specifically, if data are not directly comparable, efforts need to be made to provide documentation on the methodologies used, so that it is clear what population group is being measured.

A quick look at data published or disseminated by West and Central African countries through the websites of their respective statistical institutions reveals the paucity of data currently available. As far as data on international migration are concerned, the only readily available figures from the last censuses in West and Central African countries were from Senegal and Cape Verde.

- Through an emigration module in the 2002 census, Senegal identified those who had emigrated in the previous five years by interviewing the remaining household members. These emigrants were classified by country of emigration and also by age and sex or by reason for emigrating. Data on the place of residence five years previously were also collected and published but only on internal migrants, while data on international immigrants living abroad five years before are missing.
- Cape Verde also presented data and various analyses on international migration, based on the 2000 census. These census results include analysis based on the place of birth (with emphasis on the foreign-born), the place of previous residence (with emphasis on the last migration) and the place of residence five years before the census (with emphasis on recent immigrations). However, no details of distribution among foreign countries were provided. The question relating to place of residence also allowed for the identification of return migrants who were abroad five years previously and were enumerated in the census. Finally, the emigration module gives some indication of the number of emigrants and their demographic characteristics. This analysis is the most comprehensive to be found in the West and Central African countries. Despite the fact that only a few detailed statistical data are included in the published census data, it represents a good example of what can be done in terms of census data analysis.

For other West and Central African countries, census results related to international migration were not available at the time of preparing these guidelines.

Minimal sets of tabulations on international immigrants and population groups relevant to international migration based on questions asked in censuses are proposed in textboxes 6 and 7 (based on the United Nations Recommendations on Statistics of International Migration, 1998).

Textbox 6: Minimal set of recommended tabulations on international immigration flows

Based on the questions regarding place of residence x years ago or the year of last arrival in the country and the previous country of residence:

- Number of immigrants by country of citizenship with distinction between foreign-born and native-born and age, sex and selected socio-economic characteristics
- Number of immigrants by country of birth with distinction between returning citizens and incoming foreigners and age, sex and selected socio-economic characteristics
- Number of immigrants by duration of stay in the country (based only on the year of last immigration in the country) with distinction between returning citizens and incoming foreigners and age, sex and selected socio-economic characteristics
- Number of immigrants by reason of immigration in the country (based only on the year of last immigration in the country) with distinction between returning citizens and incoming foreigners and age, sex and selected socio-economic characteristics
- Number of immigrants by country of previous residence or that of usual residence x years ago and age, sex and selected socio-economic characteristics
- Number of emigrants by reason of emigration (based on answers given by the remaining members of the household) and age, sex and selected socio-economic characteristics
- Number of emigrants by country of next residence (based on answers given by the remaining members of the household) and age, sex and selected socio-economic characteristics

Textbox 7: Minimal set of recommended tabulations on population stocks relevant to international migration

Based on the enumerated total usual population; questions relating to country of citizenship, country of birth, last year of arrival, country of previous residence, and country of usual residence x years ago; and the identification of emigrants:

- Usually resident population by country of citizenship with distinction between foreign-born and native-born and age, sex and selected socio-economic characteristics
- Usually resident population by country of birth with distinction between citizens and foreigners and age, sex and selected socio-economic characteristics
- Usually resident population by duration of stay in the country (based only on the year of last immigration in the country) with distinction between citizens and foreigners and age, sex and selected socio-economic characteristics

Recommendation 3: Make better use of administrative data sources

The CGD Commission agrees that there is enormous scope for broadening the use of administrative data on border crossings, visas, work and residence permits, and population registers, where available, to greatly enrich understanding of the characteristics of international migrants. Doing so requires closer cooperation between ministries in charge of migration and national statistical institutions. There are tremendous benefits to such cooperation: the agencies that regulate migration have a great deal of valuable data and close links to policy formation; and national statistical institutions have rigorous statistical expertise, knowledge of international recommendations on statistical harmonization, and expertise in compiling tabulations and micro-data while respecting individual privacy and maintaining national security. Each sector can contribute its strengths, and few additional expenses are incurred since most of the cost of collecting the data has already been borne. In each West and Central African country, a Technical Working Group should be created, aimed at improving the communication between statistical institutions and the different ministries managing databases on international migration. In 2010, such a Group was created in Moldova by the International Organization for Migration (IOM), in the framework of elaborating an Extended Migration Profile.

Every West and Central African country already collects a wealth of administrative data on foreign citizens before the latter enter the country (via visa applications sent to the Ministry of Foreign Affairs),

or when they cross a border (based on data collected by border guards) or obtain a work permit (from the Ministry of Labour) or residence permit (from the Ministry of Interior and the Police). Also, on citizens emigrating or living abroad, some information is collected at border control and through embassies and consulates abroad. However, since the information is not statistically processed or disseminated, no country takes full advantage of this storehouse of knowledge to better understand migration processes. Releasing data from consular registers, and on visas, border controls, residence and work permits, asylum seekers and apprehended irregular migrants, in particular, can provide detailed portraits of migrant flows and stocks, at minimal additional cost. Nevertheless, there are important obstacles to extracting statistical data from these data sources. First of all, the various administrations involved do not have a “statistical culture”. Information is collected and checked, case by case, without being considered statistically as a whole. Problems relating to double counts, full coverage and systematic cleaning of data must be considered before the data can be deemed reliable and appropriate for statistical purposes. Mining this rich vein of migration-relevant data requires closer cooperation between ministries in charge of migration and national statistical offices. Such sources can then help in the production of timely and detailed statistics on international migrants at very low cost, compared to other statistical tools.

Minor adjustments in the current data collection processes at border controls, such as the collection of additional information, stricter observance of procedures, and more accurate recording, may help significantly to make these data more suitable for statistical purposes. Accordingly, the training of border control personnel and those in charge of completing files for residence permits when collecting migration statistics is also an important requirement. Linking complementary databases such as visa databases, border control databases, work and residence permits databases would further consolidate the available information on foreigners and facilitate the statistical data collection process. However, given the historical informal movement of people across borders in the West and Central Africa region, and the resulting gaps in data coverage, border control and permit data will always be limited and improvements difficult to implement. The data will therefore need to be supplemented by other sources, such as household surveys.

Recommendation 4: Include a migration module in household surveys

The Suitland Working Group, a working group settled in 2008 at the initiative of the US Bureau of Census in cooperation with United Nations Economic Commission for Europe (UNECE⁴),⁵ fully supported the recommendations of the CGD Commission by confirming that an essential component of better understanding migration development relationships is the collection of more and better household survey data based in countries of origin.

Only multi-topic surveys in countries of origin allow for detailed links to be established between the migration process and human development outcomes for people and households. They also represent the only feasible method of gathering detailed information on migrants in countries where resource constraints prevent specialized surveys from focusing exclusively on migrants. Surveys furthermore offer greater possibilities for capturing unauthorized migration – an issue of tremendous policy significance – than other methods.

Several different types of ongoing household surveys in countries of origin present opportunities for the inclusion of migration modules. These include Living Standards Measurement Study (LSMS) surveys, Demographic and Health Surveys (DHS), Labour Force Surveys (LFS), Household Budget Surveys (HBS), and Income Expenditure Surveys (IES), differing subsets of which are used in different countries. For the purpose of gathering useful research information on migration, LSMS surveys generally offer richer information than do some other survey types, in terms of understanding livelihoods – such as a consumption-based welfare indicator.

⁴ The United Nations Economic Commission for Europe (UNECE) was set up in 1947 to promote pan-European economic integration. It brings together 56 countries located in the European Union, non-EU Western and Eastern Europe, South-East Europe and Commonwealth of Independent States (CIS) and North America. All these countries dialogue and cooperate under the aegis of the UNECE on economic and sectoral issues.

⁵ See VELKOFF (2008).

This richness, however, comes at the cost of smaller sample sizes than those used in other surveys, such as the DHS. There is therefore no one clear survey type into which migration modules obviously fit in all settings.

A core “migration module” of roughly 10 to 15 questions should be included, where possible, in a greater number of LSMS, DHS and other ongoing survey efforts. This improvement would carry very limited additional costs.

Textbox 8 lists the basic questions to include in any household survey seeking to gather better information on the linkages between migration and development. The list is not exhaustive, and some questions may deserve higher priority than others, but a core set of migration-related survey questions should correspond roughly to this list.

Textbox 8: Basic questions to include in any household survey seeking to gather better information on the linkages between migration and development

1. Previous residence:
 - How many years have you lived in this village/town/city?
 - When you came to this place, from which province/district did you move?
(If moved from abroad, record name of country)
 - In which province/district were you born?
(If born abroad, record name of country)
2. Returned migrants:
 - In the past 5 years, did you ever migrate to another country for at least 3 months for work, to seek work, or to live?
 - In which year was your most recent migration to another country for work?
 - To what country and city did you migrate the last time?
 - How many months did you stay in that country this last time?
 - What was your main occupation while in [country]?
 - What was your main occupation before migrating?
3. Current migrants [questions asked to adult women]:
 - Do you have any children living outside the household?
 - Where is [name] currently living? (If abroad, record country and city; if not, skip rest of section.)
 - In what year did [name] move to [country]?
 - What was [name]’s occupation, if any, at the time of moving to [country]?
 - What was the highest level and grade reached by [name] at the time of leaving?
 - What is the highest level and grade reached by [name] today?
 - What is [name]’s current occupation, if any?
 - Have any members of this household received transfers or gifts in cash from [name] over the course of the last 12 months?
 - How many times have you received transfers or cash gifts from [name] in the last 12 months?
 - How much did you receive the last time?
 - What is the total value of the transfers and cash gifts that [name] has sent the household over the course of the last 12 months?

As explained by Schachter (2008), the most prevalent sample survey, and a source of limited migration information, in the West and Central African countries is the DHS funded by USAID (and others) and conducted by Macro International. Begun in 1984, the DHS are nationally representative household surveys providing data for a wide range of monitoring and impact evaluation indicators in the areas of population, health and nutrition. The sample of the standard DHS is based on a stratified two-stage cluster design, and has a sample size of between 2,000 (Côte d’Ivoire) and 13,000 (Mali) households in target countries, while smaller interim DHS surveys are also conducted in some countries. The DHS is normally conducted every five years, and all eight target countries have had at least one since 2001. Côte d’Ivoire, Ghana, Mali, Niger, and Senegal have

conducted them at regular five-year intervals. Questions used on DHS surveys are fairly standardized for all countries, enhancing the comparability of data. However, the purpose of the DHS is to measure indicators on topics such as health, education, fertility, HIV/AIDS, mortality, living conditions, and other gender issues, but not migration, which is covered in a very limited way.

Another multi-topic survey with more proven potential to measure migration is the LSMS sponsored by the World Bank. First piloted in Côte d'Ivoire and simultaneously in Peru in 1985, it has since been conducted in over 40 other countries. The LSMS programme hopes to improve the quality of household survey data, improve the capacity of statistical institutes to carry out household surveys and analyse data, and provide policymakers with data on socio-economic outcomes. Although this has only been conducted in a few countries – Côte d'Ivoire (1985–1988), Nigeria (2003 and 2006) and Ghana (1987, 1988, 1991, 1998 and 2005) – recent implementations in Ghana have included a detailed migration module, as well as a remittance-specific module in 2005. Section 5 is dedicated to migration and asked of all household members aged 7 years and older. Respondents are asked if they were born in their current village/town, if they have ever lived away for more than one year, when they last moved, if they intended to stay in their village/town for more than one year, and where they previously lived (although, for areas outside of Ghana, this is again limited to “other ECOWAS,” “Africa other than ECOWAS,” and “outside Africa”). Finally, they are asked their main reason for moving, which may include factors relating to employment, family, political issues and environment. Ghana's 2005 LSMS is the best example of migration questions being added to a general-purpose or multi-topic household survey, and the approach could perhaps be adopted by other countries in future.

Other examples of multi-purpose household surveys that include a varying number of migration questions are Mali's *Enquête Permanente Emploi Après des Ménages* [Permanent Household Survey of Employment] (EPAM, 2003), Côte d'Ivoire's *Enquête Niveau de Vie des Ménages* [Household Standard of Living Survey] (1998), Senegal's *Enquête sur les Priorités* [Survey on priorities] (ESP, 1991–2) and *Deuxième Enquête Sénégalaise Après des Ménages* [Second Senegalese Household Survey] (ESAM II, 2002) and Mauritania's *Enquête Permanente sur les Conditions de Vie des Ménages* [Permanent Survey of Household Living Conditions] (2004). Mali's survey includes questions on nationality (from Mali, CEDEAO,⁶ other African countries, or rest of the world), place of birth (in this locality, elsewhere), whether respondents always lived in the locality, the number of years they lived here, where they lived before coming here, and their reason for migrating. Côte d'Ivoire's household survey also had detailed migration questions, asking if the household head was present or absent and, if absent, how long they had been absent, as well as asking questions about ethnicity or nationality. The migration section asked for place of birth (name, department, rural/urban), how long the respondents lived here, where they lived before (same location, same department, other department, outside of the locality), and reason for move (work, health, school, to look for work, to help family, housing problem, visit, marriage, family issue). There is also a question on remittances sent (how much was sent to parents or others over the past 12 months) in the household expenditures section. More limited, Senegal's priority survey only asked four migration-related questions, including those relating to the ethnicity or nationality of the household head (no detail for non-Senegalese), how long the household members had lived continuously in this locality, the place where the household lived before moving here (no detail if abroad), and whether it was urban or rural. Mauritania's *Enquête Permanente sur les Conditions de Vie des Ménages* [Permanent Survey of Household Living Conditions] (2004) included a large number of migration-related questions. This survey includes questions on place of birth (though no details are captured for foreign births), nationality, how long/whether household members were absent from household over past 12 months, and if they lived in another household during their absence. An entire section is devoted to the topic of migration, although it mostly relates to internal migration.

The most significant nationally representative specialized migration survey in West Africa was conducted in 1993 by NESMUWA (Network of Surveys on Migration and Urbanization in West Africa) in six West and Central African countries – Côte d'Ivoire, Mali, Mauritania, Niger, Nigeria, and Senegal – in addition

⁶ Communauté Economique des Etats de l'Afrique de l'Ouest [Economic Community of West African States]

to Burkina Faso and Guinea. Although individual countries' statistical offices seem to have carried out the work, the project was coordinated by the Center for Studies and Research on Population for Development (CERPOD). Each country used the same survey instruments, and data collection was carried out simultaneously using the same methodology, making comparisons possible. Several questionnaires were used, including a household questionnaire, an individual questionnaire addressed to eligible migrants, non-migrants and return migrants, and a community questionnaire. A retrospective questionnaire was used to record migration history, and a separate questionnaire measured out-migration from the household over the previous five years. Methodological information is limited, particularly on sample design, although the surveys included about 100,000 households (resulting in about 140,000 migration histories). Though now quite dated, it remains the best source for migration data in the West African region. Several regional (subnational) studies using the same methodology have been repeated in urban areas since the original study was done (e.g. Dakar in 1997–8 and Mauritania in 1995).

An ambitious project is being organized by the French Institut National d'Études Démographiques [INED, National Institute for Demographic Studies], and surveys have been conducted in Ghana and Senegal, as well as several destination countries (Belgium, France, Italy, Spain, Netherlands and the United Kingdom). The project, called Migration between African and Europe (MAFE), aims to produce a new data set on Afro-European migration. The data are supposed to be representative, longitudinal and multi-level, offering new insights into the changing patterns and determinants of migration and circulation between Africa and Europe, as well as on the socio-economic changes associated with international migration. Representative samples of about 1,500 individuals (non-migrants and return migrants) have been randomly drawn in selected regions of Ghana and Senegal. In Europe, there were about 300 Ghanaians and 450 Senegalese in the European MAFE samples.

Recommendation 5: Exchange data on bilateral and multilateral bases and mine international databases

Immigration data from receiving countries may help to fill some of the gaps in emigration statistics of sending countries and provide for a better understanding of the outflows. Additionally, they may provide quality assurance for existing emigration data in terms of coverage, reliability and timeliness. Data sharing between countries, as well as the aforementioned harmonization of terms and definitions, may result in important improvements. Achieving that objective would require that each country involved in data sharing provide maximum detail in terms of country of birth, citizenship and previous residence, as well as disseminating all available data. No formal data exchange mechanisms exist nowadays within the West and Central African region and IOM could play a significant role in facilitating such dialogue. If data are not directly comparable, efforts need to be made to provide documentation on methodologies used to produce figures, so that it is clear exactly what population is being measured. Ultimately, a common migration database for West and Central African countries would be an ideal outcome.

Most international bodies collecting data on international migration use information sent by the national statistical institutions or responsible ministries of participating countries. An exception is the Organisation for Economic Co-operation and Development (OECD), which has its own network of correspondents in the Member States supplying data. The international migration data collected and the databases built by the international bodies are more or less available for public use through specific websites, on CD ROM and in hard-copy publications. Each organization has its own priorities and traditions for the contents of these databases and the way the statistics are published. Accordingly, the list of variables and the number of countries in published migration statistics vary significantly between international bodies, as do the time frames of the historical series available in their databases and publications.

Selected international databases on international migration

Several international databases on international migration and asylum are available on the Internet and include detailed data on countries of origin and destination. The following selection gives an indication of the

kind of data that may be relevant to West and Central African countries. Some independent or government-supported research institutions' public databases are also presented as valuable sources of data. Taking into consideration the variety of sources used to compile these databases, users are invited to read carefully all methodological explanations available in the databases and/or to consider the specificities of all national data collection systems when trying to compare or aggregate the available data for different countries.

United Nations Department of Economic and Social Affairs (UNDESA) – Population Division (UNPD) and Statistics Division (UNSD)

The United Nations Population Division (UNPD) has developed the United Nations Global Migration Database (UNGMD) – a comprehensive collection of empirical data on the stock of international migrants by country of birth and citizenship, sex and age, as enumerated by population censuses, population registers, nationally representative surveys and other official statistical sources from more than 200 countries and territories worldwide. This database was developed with support from the United Nations Children's Fund (UNICEF) and the Special Unit for South–South Cooperation established by the United Nations Development Programme (UNDP), in collaboration with the United Nations Statistics Division (UNSD), the World Bank, the University of Sussex and the Minnesota Population Center. The UNGMD (accessible at <http://esa.un.org/unmigration/>) allows access to data, for a fee, or free of charge (with a password). Migration statistics are presented by migrant stock, net migration figures and rates, starting from 1955, for most countries of the world.

The UNSD collects data on flows and stocks of migrants through the Demographic Yearbook data-collection system and from census data collection. Tables presented in the Demographic Yearbook are available on the website but only special issues of this publication include migration data. The 2006 Demographic Yearbook with special census topics⁷ includes a section devoted to international migration characteristics. The database on indicators relating to women and men also gives data on migrants – the number of women per 100 adult male international migrants.

The UNPD also holds a database on annual migration inflows and outflows (international migration flows to and from selected countries) and prepares estimates of migrant stock for all countries and territories in the world by sex and five-year intervals (Trends in Migrant Stock: The 2008 Revision⁸).

The UNPD supported the 2006 High-level Dialogue on International Migration and Development and the subsequent creation of the Global Forum on Migration and Development (GFMD) – an intergovernmental initiative to address the migration and development interconnections in practical and action-oriented ways, which convened for the first time in Brussels in July 2007 (<http://www.gfmd.org>).

The UNGMD and the 2008 revisions of the other data sources mentioned above are all accessible through the link www.unmigration.org. The UNSD collects statistics on migration flows and migrant stocks through the Demographic Yearbook data collection system consisting of three separate questionnaires (<http://unstats.un.org/unsd/demographic/sconcerns/migration/>) and disseminates these statistics to other institutions in order to minimize the international data collection burden on countries. In addition, it provides guidance on methods of statistical production and ensures the exchange of information through international meetings and publications (<http://unstats.un.org/unsd/demographic>).

The UNDP assumptions on net migration and net migration rates for UN population projections are available on their website (<http://www.un.org/esa/population/unpop.htm>). Currently, online data are available through the Population Estimates and Projections data online link to the publication World Population Prospects: The 2008 Revision.⁹

⁷ See <http://unstats.un.org/unsd/demographic/products/dyb/dybcens.htm>

⁸ See http://www.un.org/esa/population/migration/UN_MigStock_2008.pdf

⁹ See <http://esa.un.org/UNPP/>

Table 6: Migrant population by country of destination

	Cameroon	Cape Verde	Congo	Côte d'Ivoire	Ghana	Mali	Mauritania	Niger	Nigeria	Senegal
Cameroon	-	-	1,275	-	-	463	-	1,795	101,153	610
Cape Verde	-	-	-	16	94	14	-	-	145	633
Dem.Rep. of the Congo	-	-	-	-	-	-	-	-	1	-
Côte d'Ivoire	-	271	-	-	97,313	386,583	13,680	74,260	34,074	29,150
Ghana	-	-	-	-	-	-	-	-	-	-
Mali	598	-	4,063	73,644	2,516	-	6,647	5,542	1,606	11,296
Mauritania	336	-	-	168	179	6,497	-	130	-	32,729
Niger	262	-	-	810	1,132	30,402	165	-	13,093	723
Nigeria	10,703	1,802	-	1,845	78,706	56,471	7,599	37 035	-	2,009
Senegal	-	23,805	-	-	-	6,284	9,074	-	-	-
Angola	-	3,079	354	-	-	-	-	-	-	-
Australia	135	18	523	250	2,771	60	14	12	2,496	196
Austria	226	24	264	77	1,500	44	21	14	7,758	125
Belgium	4,855	79	610	1,493	2,878	153	567	667	2,275	1,178
Benin	-	-	-	8,941	6,644	839	-	49 300	29,018	-
Burkina Faso	-	-	-	495,932	29,545	40,181	-	11 699	3,273	2,554
Canada	785	90	175	810	13,080	250	45	60	4,770	1,025
Central African Republic	5,188	8	1,081	106	16	359	44	313	1,111	1,226
Chad	31,551	-	728	-	-	-	-	2 661	15,089	-
Congo	2,156	-	-	-	2,850	2,912	601	-	-	2,159
Denmark	415	19	548	407	1,448	31	29	11	887	102
Egypt	37	-	66	98	101	56	59	59	468	184
Equatorial Guinea	756	-	-	-	-	-	-	-	817	-
Finland	419	8	72	94	799	4	7	18	1,115	97
France	26,890	11,938	35,318	29,879	4,069	35,978	8,237	1 247	1,978	53,859
Gabon	15,081	-	6,639	1,630	2,438	13,937	-	-	6,834	9,776
Gambia	-	-	-	-	-	6,370	2,243	-	-	81,567
Germany	14,425	-	493	2,491	20,447	870	-	794	17,186	2,509

	Cameroon	Cape Verde	Congo	Côte d'Ivoire	Ghana	Mali	Mauritania	Niger	Nigeria	Senegal
Ghana	229	-	7	16,290	-	9,499	32	19 772	31,568	197
Greece	438	34	851	117	407	17	5	76	1,889	46
Guinea	-	65	-	1,621	877	10,196	252	914	597	4,440
Guinea Bissau	-	409	-	-	-	-	414	-	-	13,820
Ireland	278	9	2,037	103	409	8	6	7	16,677	31
Italy	7,994	4,569	3,591	19,408	42,327	992	547	1 113	44,544	67,510
Japan	8	2	2	14	1,852	7	1	1	2,456	24
Liberia	-	-	-	2,936	15,706	1,611	-	-	1,993	273
Luxembourg	88	2,420	-	40	19	7	2	6	23	63
Mozambique	-	3,378	-	-	-	-	-	-	-	-
Netherlands	1,267	11,455	1,043	451	12,110	123	413	208	4,327	715
New Zealand	21	3	99	9	369	9	3	3	522	9
Norway	450	375	235	216	1,335	34	11	32	708	131
Philippines	-	72	-	-	94	-	-	-	2,245	-
Portugal	44	44,060	1,580	67	49	42	22	-	118	600
Saudi Arabia	-	-	-	-	-	-	-	-	13,511	-
Sierra Leone	-	6	-	347	1,264	700	146	166	1,971	624
South Africa	1,018	-	7,463	493	2,865	47	-	10	7,099	1,186
Spain	4,852	4,246	2,061	2,266	12,856	19,011	9,572	68	34,064	45,371
Sudan	-	-	-	-	-	677	78	334	17,357	137
Sweden	1,087	346	530	595	1,569	82	37	26	2,276	447
Switzerland	1,981	979	600	899	1,190	195	121	45	1,329	904
Togo	-	-	-	-	11,800	1,162	-	7 776	7,920	-
Uganda	-	-	63,998	54	73	-	36	-	145	53
United Kingdom	-	-	-	-	90,000	-	-	-	139,000	-
United Republic of Tanzania	-	-	17,444	-	-	-	-	-	-	-
United States	11,765	26,606	463	7,173	65,572	359	79	266	139,891	10,534
Zambia	17	-	1,798	-	162	192	-	-	138	162

Source: United Nations Global Migration Database (UNGMD), accessed in December 2010.

United Nations High Commissioner for Refugees (UNHCR)

The United Nations High Commissioner for Refugees (UNHCR) collects and compiles data on asylum-seekers and refugees. More precisely, these data include information on asylum applications, refugee status determination, recognition rates, refugee populations and movements, demographic characteristics such as age, sex, and major refugee locations.

The statistics are available on the website <http://www.unhcr.org/pages/49c3646c4d6.html>

The UNHCR website presents facts and figures and analyses basic patterns and trends. Longer data series start from 1992. Definitions, sources and other data considerations are also provided. Quarterly data on asylum trends are available starting from 2000 and on refugees (refugee and refugee status determination trends in developing countries) starting from 2002. Methodological and analytical issues are also published.

Table 7: Refugees and asylum-seekers, by origin, end 2008

Country of origin	Total refugees and people in refugee-like situations	Asylum-seekers (pending cases)
Cameroon	13,870	2,933
Cape Verde	30	7
Dem. Rep. of the Congo	367,995	36,278
Côte d'Ivoire	22,227	6,468
Ghana	13,242	2,016
Mali	1,758	750
Mauritania	45,601	784
Niger	796	271
Nigeria	14,169	10,474
Senegal	16,006	819

Source: UNHCR field officers, Government agencies and NGO's.

Note: Data in table were obtained on 10 June 2009 and are provisional.

World Bank

The mission of the World Bank is to help developing countries and their people to alleviate poverty, and international migration is therefore considered. Under the data section, the World Development Indicators Online of the World Bank website (<http://www.worldbank.org/>) presents a list of time series indicators in the database that include a subsection on migration. Data are provided on international migration stock, net migration, and refugee population by country of origin and territory of asylum. This is a new series in this database, created in 2005. Access to certain parts of the database is free; to others, access must be authorized. The freely accessible part of the database does not include migration data. Information on the World Bank Africa Migration Project (Migration, Remittances and Development in Africa) is available at <http://go.worldbank.org/VX9QV9FIA1>

The World Bank concentrates mainly on issues relating to international migration and development, with special attention given to filling the gaps in existing knowledge about migration and its related themes such as remittances, reduction of poverty, gender differences and brain drain. World Bank activity includes extensive data gathering and analysis on the development impact of migration, to identify migration policies, regulations and institutional reforms by developed and developing countries that will lead to improved development outcomes. Information on the migration topics and data can be obtained at www.worldbank.org/migration. Data classified by region can be found on the website under the section 'Data & Research'.

International Labour Organization (ILO)

The International Labour Organization (ILO) collects and compiles data on international labour migration. Statistics are available from the Statistics and Databases section of the ILO website (<http://www.ilo.org/global/statistics-and-databases/lang--en/index.htm>), which includes LABORSTA – the database of labour statistics (<http://laborsta.ilo.org>). This database, in turn, incorporates the Database on International Labour Migration Statistics (ILM). This considerably new data collection has been organized by the ILO through national statistical institutions, starting with data from 1998. It includes basic data on stocks and flows of employed migrants. However, only a few origin and destination countries are presented for each reporting country.

ILO publishes 12 series of statistics on international migration, by key economic characteristics (economic activity, employment) and basic demographic variables (sex, educational attainment, etc.) through its LABORSTA database. The organization also develops methodologies and tools to increase the regular availability and improve the comparability of statistics on international migration – particularly data on the socio-economic characteristics of migrants (Cantisani et al., 2009, Section C.7) and data on forced labour migration through labour force surveys – and features analytical studies that review statistics on topics of special interest such as migration of the highly skilled and remittances. Methodologies and studies are available on the ILO website (<http://www.ilo.org>). As part of a larger initiative seeking to develop the contribution of migration to economic integration and development in Africa, the ILO recently mapped the migration data available in West, North and East Africa (<http://migration-africa.itcilo.org>).

Organization for Economic Co-operation and Development (OECD)

The OECD website (www.oecd.org) includes a set of migration data under the section ‘Topics/ International migration’. Under the sub-section ‘Statistics’ detailed information on the foreign-born population for almost all member countries of the OECD can be found with a detailed list of all countries of origin (<http://www.oecd.org/migration/dioc/extended>).

The work of the OECD in the area of international migration is based on regular monitoring of migration movements and policies in member and non-member countries, focusing on the socio-economic aspects of migration, on the management of labour migration to support economic growth, on the labour market integration of immigrants in OECD countries and on the links between migration, demography and economic growth in countries of origin.

Table 8: Immigration to selected OECD countries, by country of origin, 2007

Country of destination	Country of origin									
	Cameroon	Cape Verde	Dem. Rep. of the Congo	Côte d'Ivoire	Ghana	Mali	Mauritania	Niger	Nigeria	Senegal
Australia	31	1	576	85	273	2	4	8	267	8
Canada	834	-	1,314	669	735	142	65	60	2,255	386
France*	3,846	536	1,995	3,422	192	2,806	597	122	443	2,562
Italy*	-	-	-	1,520	2,891	-	-	-	2,248	2,373
Japan	136	8	34	71	228	38	14	60	19	108
Korea	-	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-	-
New Zealand	1	-	21	-	29	-	10	1	35	-
Poland*	75	-	26	-	-	-	-	-	566	20
Portugal*	-	4,090	-	-	-	-	-	-	-	-
Turkey	47	-	77	16	54	6	18	7	314	61
United States of America	3,392	2,048	1,129	1,193	7,610	412	651	97	12,448	1,024

Notes: Country of origin can be defined differently by destination countries – country of birth, country of citizenship or country of previous residence.

* indicates EU Member States for which data are available in the OECD database but not in the Eurostat database.

Eurostat

Eurostat – the Statistical Office of the European Commission – collects migration data mainly from EU Member States and European Free Trade Association (EFTA) countries, although some data are also available from other UNECE countries. On the Statistics page of the OECD website (<http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/themes>), a wide range of tables and metadata on international migration and asylum are presented (see section on Population and Social Conditions). The database allows the user to choose data by individual country or groups of countries by all available variables. The database also includes metadata on sources and the rules for collecting data by reporting countries.

Tables 9, 10 and 11 are extracted from the subsection International Migration and Asylum, covering major migration data collections: acquisition of citizenship, asylum (applications and decisions) by citizenship, international migration flows, population by citizenship and by country of birth, and residence permits. Data presented in the database are mostly annual data but may, in some cases, be quarterly or monthly data. Migration flow data include all countries of the world as next or previous country of residence, or as country of citizenship. Annual population figures are also presented by all countries of citizenship. For some reporting countries, population stocks by country of birth are also published and, starting from 2008, both population stocks and immigration flows should include breakdown by country of birth. However, presenting detailed data by individual countries of birth, previous and next residence and citizenship is not obligatory for reporting countries.

The Eurostat database presents data for different periods, with the longest data series being on migration flows by previous and next country of residence, starting from 1960, while data on population stocks and flows by citizenship are available starting from 1985. However, data are not necessarily available for all countries for the same time frame. Some data are also available through Eurostat publications, the electronic versions of which are also available on the website.

Table 9: Immigration to European Economic Area (EEA) countries by country of citizenship, 2007

Country of destination	Country of citizenship									
	Cameroon	Cape Verde	Dem. Rep. of the Congo	Côte d'Ivoire	Ghana	Mali	Mauritania	Niger	Nigeria	Senegal
Austria	43	5	37	20	84	15	7	9	777	32
Belgium	835		1,181	219	385	-	45	93	342	201
Bulgaria	0	0	0	0	0	0	0	0	0	0
Cyprus	0	0	0	0	0	0	0	0	17	0
Czech Republic	35	0	25	17	35	4	1	0	160	8
Denmark	31	1	133	13	111	1	-	-	84	6
Estonia	0	0	0	0	0	0	0	0	0	0
Finland	125	1	109	15	123	1	2	6	212	5
France (2006)	5,261	676	1,868	4,085	255	3,290	850	331	607	4,379
Germany	1,719	24	261	256	1,015	63	55	57	1,882	217
Greece	14	0	7	2	18	0	0	1	112	13
Hungary	20	0	0	3	5	0	1	2	109	3
Iceland	1	4	-	-	-	-	1		11	2
Ireland	-	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-	-
Latvia	0	0	0	0	0	0	0	0	0	0
Liechtenstein	-	-	-	-	-	-	-	-	-	-
Lithuania	1	0	0	0	1	0	0	0	7	1
Luxembourg	53	163	13	7	0	4	1	3	19	13
Malta	5	0	0	2	0	5	0	0	5	0
Netherlands	125	110	23	43	400	8		16	426	29
Norway	59	4	353	24	116	5	1	1	118	12
Poland	0	0	0	0	0	0	0	1	14	1
Portugal (2006)	4	1,723	10	6	11	0	1	0	18	58
Romania	1	0	1	0	0	0	2	0	6	0
Slovakia	0	0	0	1	1	0	0	1	19	0
Slovenia	1	0	0	1	2	0	0	0	8	0
Spain	910	589	106	455	1,655	3,378	1,269	31	6,308	11,602
Sweden	269	12	161	50	103	6	6	1	314	44
Switzerland	209	18	122	85	44	22	7	9	213	98
United Kingdom	-	-	-	-	-	-	-	-	-	-

Source: Eurostat database, accessed in December 2010.

Table 10: Immigration to EEA countries, by country of previous residence, 2007

Country of destination	Country of previous residence									
	Cameroon	Cape Verde	Dem. Rep. of the Congo	Côte d'Ivoire	Ghana	Mali	Mauritania	Niger	Nigeria	Senegal
Austria	44	4	49	22	105	13	6	8	777	31
Belgium	-	-	-	-	-	-	-	-	-	-
Bulgaria	0	0	0	0	0	0	0	0	0	0
Cyprus	0	0	0	0	14	0	0	0	5	0
Czech Republic	34	0	28	14	35	4	1	1	157	8
Denmark	24	1	52	15	163	1	-	-	82	9
Estonia	-	-	-	-	-	-	-	-	-	-
Finland	112	0	39	9	118	1	2	8	199	4
France (2006)	-	-	-	-	-	-	-	-	-	-
Germany	1,652	29	271	253	1,027	91	49	63	1,799	256
Greece	-	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-	-
Iceland	1	4	1	0	5	0	5	0	11	2
Ireland	-	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-	-
Latvia	0	0	0	0	0	0	0	0	0	0
Liechtenstein	-	-	-	-	-	-	-	-	-	-
Lithuania	0	1	0	0	1	0	1	0	7	1
Luxembourg	1	22	1	-	-	-	-	-	-	-
Malta	-	-	-	-	-	-	-	-	-	-
Netherlands	150	132	89	95	532	24	7	21	578	67
Norway	47	4	141	24	109	13	1	7	99	11
Poland	0	0	0	0	0	1	0	1	22	1
Portugal (2006)	-	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-	-
Slovakia	-	-	-	-	-	-	-	-	-	-
Slovenia	0	0	0	0	1	0	0	0	0	0
Spain	776	426	106	436	1,381	2,948	1,116	26	4,932	10,306
Sweden	274	11	111	50	107	4	6	4	271	51
Switzerland	-	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-	-

Source: Eurostat database, accessed in December 2010

Table 11: First residence permits granted by citizenship in EEA countries, 2008

Country of destination	Country of citizenship									
	Cameroon	Cape Verde	Dem. Republic of the Congo	Côte d'Ivoire	Ghana	Mali	Mauritania	Niger	Nigeria	Senegal
Austria	0	0	0	0	0	0	0	0	5	0
Belgium	375	0	1,180	145	45	15	135	80	90	25
Bulgaria	0	0	0	0	0	0	0	0	0	0
Cyprus	65	0	30	15	55	0	0	0	160	5
Czech Republic	5	0	5	0	0	0	0	0	0	0
Denmark	0	0	5	0	0	0	0	0	0	0
Estonia	0	0	0	0	0	0	0	0	0	0
Finland	10	0	150	5	10	0	0	0	50	5
France	745	135	1,685	755	75	1,310	390	20	195	410
Germany	65	0	140	20	95	0	0	5	130	5
Greece	0	0	0	0	5	0	0	0	10	0
Hungary	5	0	0	0	0	0	0	0	10	0
Iceland	-	-	-	-	-	-	-	-	-	-
Ireland	45	0	165	25	55	0	0	5	785	0
Italy	50	0	20	495	145	25	5	30	620	30
Latvia	0	0	0	0	0	0	0	0	0	0
Liechtenstein	-	-	-	-	-	-	-	-	-	-
Lithuania	0	0	0	0	0	0	0	0	0	0
Luxembourg	-	-	-	-	-	-	-	-	-	-
Malta	0	0	0	0	0	0	0	0	20	0
Netherlands	85	60	400	85	270	0	20	35	295	20
Norway	5	0	10	35	5	0	0	0	45	0
Poland	10	0	0	0	0	0	0	0	20	5
Portugal	0	285	0	0	5	0	0	0	5	0
Romania	5	0	0	5	0	0	0	0	5	5
Slovakia	0	0	0	0	0	0	0	0	0	0
Slovenia	0	0	0	0	0	0	0	0	0	0
Spain	205	85	135	185	745	1,100	445	10	1,345	1,785
Sweden	30	0	125	15	60	0	0	0	105	5
Switzerland	-	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-	-

Source: Eurostat database, accessed in December 2010

Consortium for Applied Research on International Migration (CARIM)/Migration Policy Centre (MPC)

The Consortium for Applied Research on International Migration (CARIM) website (<http://www.carim.org>) is a tool for disseminating data and analyses on migration in the following countries: Algeria, Chad, Egypt, Israel, Jordan, Lebanon, Libyan Arab Jamahiriya, Mali, Mauritania, Morocco, Niger, Palestine, Senegal, Sudan, Syria, Tunisia and Turkey. All are studied as origin, transit and destination countries. However, there are also some tables supplied by other receiving countries in Europe and elsewhere, including some West and Central African countries (Mauritania, Senegal) as countries of origin.

US Census Bureau

The US Census Bureau website features an International Data Base (IDB) (<http://www.census.gov/ipc/www/idb/informationGateway.php>) that includes demographic and socio-economic statistics for 227 countries and areas of the world. The migration data include estimated number of migrants and migration rate by sex, age and urban/rural residence. The IDB obtains data from country sources but also includes estimates and projections calculated by the US Census Bureau. Information goes as far back as 1950 and as far ahead as 2050. Because the IDB is maintained as a research tool, the amount of information available for each country may vary. The US Census Bureau supported the creation of the Suitland Task Force on the Contributions of Household Surveys to the Measurement of Migration and Remittances (Velkoff, 2008).

Migration Policy Institute (MPI)

The website of the Migration Policy Institute (MPI) – an independent research institution on international migration, based in Washington – provides access to its Migration Information Source (<http://www.migrationinformation.org/Resources/>), which is an interactive and expanding database that provides migration data and generates instant charts along the way. Up-to-date data and new countries are added continually. Currently, it supplies migration data on a selection of countries, by stock and inflow of foreigners, including country of birth and country of nationality (citizenship). There are also data on asylum and acquisition of citizenship. Length of time series varies by countries. Data on stocks, flows, asylum and acquisition of citizenship start from 1980, with net migration estimates dating back to 1950 and including very recent estimates. The sources for the country data are mostly national statistical institutions, with some data originating from international bodies' data collections.

Table 12: Resident population by country of birth, 2000 Census Round

Destination countries	Cameroon	Cape Verde	Democratic Republic of the Congo	Côte d'Ivoire	Ghana	Mali	Mauritania	Niger	Nigeria	Senegal
Antigua & Barbuda	-	-	-	-	26	-	-	-	36	-
Australia	64	24	267	73	2,040	26	14	14	1,738	183
Austria	-	-	-	-	-	-	-	-	2,913	-
Belgium	2,407	393	49,885	1,363	2,682	295	293	214	1,507	1,455
Belize	-	1	-	-	9	-	2	11	67	-
Bolivia	2	2	2	2	2	-	-	-	11	2
Cameroon	-	-	295	-	-	463	-	1,795	127,099	610
Canada	2,390	325	10,200	1,865	17,070	865	155	215	10,650	1,865
Cape Verde	-	-	-	-	-	-	-	-	-	80
Cayman Islands	0	0	0	0	2	0	0	12	5	0
Chile	4	1	14	10	8	96	1	10	19	6
Colombia	-	-	5	-	2	-	-	-	4	3

Dem. Rep. of the Congo	-	-	-	-	-	-	-	-	-	-
Cote d'Ivoire	-	-	-	-	-	-	-	-	-	-
Czech Republic	6	13	33	14	42	16	0	6	69	31
Denmark	190	18	0	337	1,085	24	26	7	622	82
Dominican Republic	1	1	1	1	0	4	0	1	14	1
Ecuador	19	-	1	1	16	1	-	4	21	-
Finland	28	5	329	49	295	4	0	12	291	40
France	36,020	12,404	25,670	45,231	4,376	40,222	9,591	3,391	2,563	82,116
Ghana	-	-	-	-	-	-	-	-	-	-
Greece	438	34	1 226	117	407	17	5	76	1,889	46
Hungary	32	1	19	6	58	12	4	1	208	8
Iceland	-	-	-	-	-	-	-	-	33	-
India	-	-	-	-	-	-	-	-	763	-
Ireland	261	4	100	101	387	7	6	7	9,225	29
Liberia	-	-	-	1,770	8,068	1,597	-	-	1,940	197
Lithuania	-	-	-	-	5	-	-	1	4	1
Luxembourg	88	2,420	575	40	19	7	2	6	23	63
Mali	-	-	-	-	-	-	-	-	-	-
Mauritania	-	-	-	-	-	-	-	-	-	-
Mexico	4	1	10	4	12		5		30	14
Netherlands	985	11,053	3,239	379	11,201	115	383	147	4,093	646
New Zealand	24	3	60	6	243	6	-	3	360	6
Nicaragua	1	-	17	-	-	2	7	-	9	66
Niger	262	-	-	4,369	4,131	30,746	-	-	37,832	723
Nigeria	-	-	-	-	-	-	-	-	-	-
Norway	310	240		140	1,171	24	11	9	512	100
Panama	-	1	1	2	10	-	1		14	-
Peru	3	-	8	34	2	3	6	2	8	1
Poland	10	-	34	8	46	25	3	1	198	24
Portugal	58	44,964	1,617	92	54	44	31	0	146	631
Sao Tome and Principe	-	127	-	-	-	-	-	-	-	-
Senegal	-	-	-	-	-	4,175	7,061	-	-	-
Slovakia	0	0	6	11	4	0	1	1	2	0
Spain	1,580	2,282	770	653	3,189	3,273	3,745	68	8,992	11,391
Sudan	0	0	629	0	0	0	0	0	15,683	0
Sweden	257	316	1,226	384	1,189	60	23	15	932	291
Switzerland	2,532	1,223	3,600	1,100	1,651	196	84	82	1,483	1,007
Turkey	16	0	0	1	144	4	13	3	293	68
United Kingdom	3,233	328	8,569	2,794	56,112	121	28	96	88,378	723
United States of America	12,355	27,085	5,975	7,595	67,190	2,815	2,240	1,075	140,235	10,860
Uruguay	-	-	2	1	-	1	-	-	5	2
Venezuela	4	3	-	2	18	2	-	-	77	7

Source: MPI, 2010.

BIBLIOGRAPHY

- Ba, H. and B. Ndione
2006 Labour Migration Statistics in West Africa. International Migration Papers, No. 79E. International Labour Organization (ILO), Geneva.
- Bilsborrow, R. et al.
1997 International Migration Statistics: Guidelines for Improving Data Collection Systems. International Labour Organization (ILO), Geneva.
- Bourchachen, J.
2006 Adapting residence permits registers in the Maghreb countries to measure international migration flows and stocks. MEDSTAT-MED-Migr, International Migration Statistics. Working Papers and Studies KS-CC-06-002-EN. European Communities, Luxembourg.
- Cantisani, G. et al.
2006 Statistics on Population with Usual Residence, in Poulain et al. (eds) THESIM. Towards Harmonised European Statistics on International Migration. Presses Universitaires de Louvain, Louvain-la-Neuve, pp. 181–201.
2009 Guide on the compilation of statistics on International Migration in the Euro-Mediterranean Region. MEDSTAT II. Adetef, Paris.
- Center for Global Development
2009 Migrants Count. Five Steps Toward Better Migration Data. Center for Global Development (CGD), Washington, D.C.
- European Union
2007 Regulation (EC) N° 862/2007 of the European Parliament and of the Council of 11 July 2007 on Community statistics on migration and international protection and repealing Council Regulation (EEC) N° 311/76 on the compilation of statistics on foreign workers. Official Journal of the European Union, 2007-07-31, n° L 199, pp. 23–29.
- Herm, A.
2006 Recommendations on International Migration Statistics and Development of the Data Collection at an International Level, in Poulain et al. (eds) THESIM. Towards Harmonised European Statistics on International Migration. Presses Universitaires de Louvain, Louvain-la-Neuve, pp. 77–106.
- Hoffman, E. and S. Lawrence
1996 Statistics on International Labour Migration: A Review of Sources and Methodological Issues. Bureau of Statistics, International Labour Organization (ILO), Geneva.
- IUSSP (International Union for the Scientific Study of Population)
1981 Indirect procedures for estimating emigration, IUSSP Paper n° 18.
- Lemaitre, G. et al.
2007 Standardised Statistics on Immigrant Inflows. Results, Sources and Methods. Organisation for Economic Co-operation and Development (OECD), Paris.
Available at <http://www.oecd.org/dataoecd/39/29/38832099.pdf> (accessed on 8 December 2010).
- Novak, B. et al.
2006 Statistics on International Migration Flows, in Poulain et al. (eds) THESIM. Towards Harmonised European Statistics on International Migration. Presses Universitaires de Louvain, Louvain-la-Neuve, pp. 203–231.

OECD

- 2008 A Profile of Immigrant Populations in the 21st Century: Data from OECD Countries. Organisation for Economic Co-operation and Development (OECD), Paris. See http://www.oecd.org/document/27/0,3343,en_2649_33931_40110299_1_1_1_1,00.html (accessed on 8 December 2010).

Philips, H.

- 2006 Measurement, concepts and definitions of international migration: the case of South Africa. Paper presented at United Nations Expert Group Meeting on Measuring International Migration: Concepts and Methods, 4–7 December 2006, United Nations, New York.

Poulain, M.

- 2008 A special methodology using a border crossing database for the estimation of international migration flows. Document prepared for the MEDSTAT II Workshop 2008.

Poulain, M. et al. (eds)

- 2006 Towards Harmonised European Statistics on International Migration. Presses Universitaires de Louvain, Louvain-la-Neuve.

Schachter, J.

- 2006 “Terms and Definitions” and “Data Sources.” In Data Collection, Chapter 5, of Handbook on Establishing Effective Labour Migration Policies in Countries of Origin and Destination. International Organization for Migration (IOM)/Organization for Security and Co-operation in Europe (OSCE)/International Labour Organization (ILO), Geneva.
- 2007 A comparison of recent internationally coordinated household surveys on international migrant remittances: in search of common ground. Paper presented at UN Expert Group Meeting on the Contribution of Household Surveys to Measuring Remittances. Washington, D.C.
- 2008 Enhancing Data on Migration in West and Central Africa. International Organization for Migration (IOM), Geneva.
- 2009 Data Assessment of Labour Migration Statistics in the SADC Region: South Africa, Zambia, Zimbabwe. International Organization for Migration (IOM), Geneva.

Shaw, W.

- 2007 Migration in Africa: A Review of the Economic Literature on International Migration in 10 Countries. Development Prospects Group, the World Bank, Washington, DC.

UNDESA

- 1998 Recommendations on Statistics of International Migration, Statistical Papers Series M, No. 58, Rev. 1. United Nations Department of Economic and Social Affairs (UNDESA), Statistics Division, New York.
- 2002 International Migration 2002. United Nations Department of Economic and Social Affairs (UNDESA), Population Division, New York.
- 2005 Demographic Yearbook 2005. United Nations Department of Economic and Social Affairs (UNDESA), Statistics Division, New York.
- 2007 Expert Group Meeting on the Use of Censuses and Surveys to Measure International Migration. United Nations Department of Economic and Social Affairs (UNDESA), Statistics Division, New York, 24–28 September 2007. Available at: <http://unstats.un.org/unsd/demographic/meetings/egm/migrationegmsep07> (accessed on 8 December 2010).
- 2008 Principles and Recommendations for Population and Housing Censuses, Revision 2. Statistical Papers Series M, No. 67/Rev.2, ST/ESA/STAT/SER.M/67/Rev.2. United Nations Department of Economic and Social Affairs (UNDESA), Statistics Division, New York.

UNDESA/UNWTO

- 1994 Recommendations on Tourism Statistics. United Nations Department of Economic and Social Affairs (UNDESA), Statistics Division, New York/United Nations World Tourism Organization (UNWTO), Madrid.

UNECE

- 2009 Guidelines on the use and dissemination of data on international immigration to facilitate their use to improve emigration data of sending countries. Paper presented at the fifty-seventh plenary session of the Conference of European Statisticians. United Nations Economic Commission for Europe (UNECE), Geneva.

UNHCR

- 2008 Global Trends: Refugees, Asylum-seekers, Returnees, Internally Displaced and Stateless Persons. United Nations High Commissioner for Refugees (UNHCR), Geneva.

Velkoff, V.

- 2008 Creation of the Suitland Task Force on the Contributions of Household Surveys to the Measurement of Migration and Remittances. Document submitted to the Joint United Nations Economic Commission for Europe (UNECE)/Eurostat Work Session on Migration Statistics, Geneva, 3–5 March 2008.

Zaba B.

- 1986 Measurement of Emigration Using Indirect Techniques. Manuel for the Collection and Analysis of Data on Residence of Relatives. International Union for the Scientific Study of Population (IUSSP), Ordina Editions, Paris.
- 1987 The indirect estimation of migration: a critical review. *International Migration Review*, 21(4), Winter 1987.



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