

Migration and Remittances Household Surveys in Sub-Saharan Africa: Methodological Aspects and Main Findings

March 31, 2011

Sonia Plaza, Mario Navarrete, and Dilip Ratha*

Abstract

Important documentation related to the Migration and Remittances Household Surveys—including the project report, methodological specifications, and anonymized microdata—have recently been made available to the research community and to policy makers (see the World Bank website). The purpose of this paper is to describe the surveys' data sources, content, methodological underpinnings, and the way the fieldwork and data cleaning were carried out. Some preliminary results will be presented so as to underscore the potential these surveys afford to researchers everywhere.

Keywords: Migration and Remittances Household Surveys, Sub-Saharan Africa, International migration, Internal Migration, Remittances, Development, Poverty reduction

*

This background paper—a product of the joint Migration and Remittances Unit of the Development Economics Vice Presidency (DEC), and Poverty Reduction and Economic Management Network (PREM)—was prepared as part of the Africa Migration Project. The findings from the surveys are background material for a joint regional report of the African Development Bank and World Bank titled “Leveraging Migration in Africa: Remittances, Skills, and Investments Migration, Remittances and Development in Africa” (released in March 2011).

Acknowledgments

The Africa Migration and Remittances household surveys were managed by Sonia Plaza under the direction of Dilip Ratha. The following individuals and organizations contributed to the implementation of surveys: Mario Navarrete (Sistemas Integrales, Chile), Professor Richard E. Bilsborrow (Carolina Population Center, University of North Carolina) and Richard Adams (consultant, World Bank). The household surveys were conducted by the following principal researchers: Professor Yiriyibin Bambio, Universite de Ouagadougou (Burkina Faso); Rose Ngugi, University of Nairobi, School of Economics (Kenya); Chukuwuma Agu (Nigeria), Zibah Consults Limited; Professor Fatou Cisse, Consortium pour la Recherche Economique et Sociale (Senegal), Innocent Matshe (Senior Research Specialist), Human Sciences Research Council, (South Africa); E.S.K. Muwanga-Zake and Alex Ntale, Makerere Statistical Consults Limited, (Uganda).

Colleagues in the Migration and Remittances Unit, Adriana Castaldo, Ani Silwal, Carly Petracco, Farai Jena, Jacqueline Irving, Neil Ruiz, and Zhimei Xu provided useful inputs, analysis and research assistance at various stages. Special thanks to Sanket Mohapatra for extensive consultations. Olivier Dupriez, Akiko Sagesaka, Mehmood Asghar, Matthew John Welch and Tefera Bekele Degefu provided support for the survey catalogue.

1. Introduction

As part of the Africa Migration Project, six Migration and Remittances Household Surveys were conducted in Burkina Faso, Kenya, Nigeria, Senegal, South Africa, and Uganda. The project has received financial support from the African Development Bank (AfDB), Canadian International Development Agency (CIDA), Department of International Development (DFID), International Fund for Agricultural Development (IFAD), Ministry of Foreign Affairs of Denmark, French Ministry of Immigration, Integration, National Identity and Development Partnership, and the Swedish International Development Agency (SIDA). The surveys used a standardized methodology developed by the World Bank and were conducted by primarily country-based researchers and institutions during 2009 and 2010. They covered recent migration and remittance trends, housing conditions, household assets and expenditures, use of financial services, internal and international migration and remittances from former and nonformer household members, (that is, individuals who regularly send remittances but have not been part of the current household) and return migration patterns. Collectively, these surveys provide unique data and a new research methodology for collecting information on migration and remittances in Sub-Saharan Africa.

A unique feature of these surveys is that they allow for comparison across countries. Since the surveys were implemented during the same period, they provide us with a good picture of regional migration and remittances, at the household level, in the six countries surveyed.

This paper describes the design of the six African Migration and Remittances Household Surveys and reports preliminary findings on migration and remittances, labor force activity, return migration, the education of migrants, and other topics.

2. Overview of the African Migration and Remittances

Household Surveys

Despite its importance, migration remains a topic on which available data are relatively weak or not available (Thorogood 2005, World Bank 2005). The national statistical institutions of many African countries fail to provide accurate statistics on migration. Some countries collect migration data in their censuses, living standards measurement studies, demographic and household surveys, and labor force surveys. According to Carletto and de Braw (2008), there are two types of household surveys that collect migration data: specialized surveys and general-purpose surveys (such as the Living Standards Measurement Study). Specialized surveys are particularly helpful in obtaining information on the characteristics of migrants.

Though data on migration and remittances have been captured in Sub-Saharan countries through these two types of surveys, there is no consistent database tracking migrant populations or flows in Sub-Saharan countries. As a preparation for the African Migration and Remittances Household Surveys, the authors reviewed about 70 household surveys conducted between 1990 and 2006 that were available through the World Bank's Development Data Platform (DDP) microdata catalogue (see box 2.1). Some issues—for example, constraints on migration—were not adequately addressed in most of the surveys reviewed. Several surveys did not ask questions about the channels through which remittances were transferred and some did not even provide any information on migration or remittances.

Box 2.1 Migration and remittances in African household surveys

In a review of 70 household surveys conducted between 1990 and 2006, researchers found that migration and remittances data are spread across various sections of most surveys and are rarely linked to one another. The main findings are as follows:

- 1) Migration modules are sometimes found in a separate section (for example, Cameroon, 2004; Gambia, 1992; Guinea, 1994; Mali, 1994; Rwanda, 1998; and Uganda, 1993). In other cases the topic of migration is appended to other modules, such as literacy (Burkina Faso, 1998), education (Ivory Coast, 1998), and employment (Senegal, 1991).
- 2) Most surveys collect data on the migration history of all household members above a certain age (typically 10 or 15 years); however, some collect information on the migration history of the household head only.
- 3) Most surveys collect data on the migration of household members since birth but some limit the inquiry to migratory movements during the preceding one year. Remittances are captured as part of income and expenditures modules, but many of the surveys do not distinguish between remittances and gifts (or other transfers) received by the households.

The objective of the World Bank surveys was to achieve a better understanding of the characteristics of migrants in sending countries and thereby help inform national policy makers of migration and remittances motives, channels, and impacts. The collection of migration and remittance data through these surveys addresses serious gaps in knowledge of the motives for migration, the estimated remittances sent through formal and informal channels, the remittances sent by former and nonformer household members, and return migration.

Migrant household surveys present a methodological challenge, especially for Sub-Saharan African countries. Conducting a survey in six countries is a challenge. In measuring international migration, researchers must set up a good sample framework and develop a way to handle the large sample size and the complexity of the survey itself. Of the six countries surveyed, South Africa was the only predominantly immigrant-receiving country, with a large presence of immigrants from various parts of Africa. The other five, predominantly migrant-sending countries surveyed were Burkina Faso, Senegal, Nigeria, Uganda, and Kenya.

Given a previous lack of information on the surveys' topics, the design called for representative samples of households in each country to capture a series of information on migration and remittances. Four key elements of the design were the inclusion of questions on: (i) informal channels that included remittances sent through visiting friends and relatives or carried by the migrants themselves; (ii) the characteristics, remittances sent, and migration motives of former household and nonhousehold members; (iii) return migration; (iv) internal, intraregional, and international migration.

We hope that these surveys will shed light on many aspects of migration and remittance behavior and further their analysis along dimensions of gender, motive, educational characteristics, labor force participation, and access to finance.

3. Basic survey features

3.1 Survey type

A single-round, cross-sectional survey was implemented as part of the project in six countries. This captured information about households with internal migrants, international migrants, and no migrants.

The survey instrument and its component parts

The survey instrument obtained information on a variety of demographic, social, and economic characteristics, such as education, marriage status, housing conditions, labor force participation, skills, languages, and access to finance. The standardized questionnaire includes seven modules that focus on the following: (i) household roster, (ii) housing conditions, (iii) household assets and expenditure, (iv) household use of financial services, (v) internal and international migration and remittances from former household members, (vi) internal and international migration and remittances from nonhousehold members, and (vii) return migration.

- *Module 1.* This module includes a series of questions on the household. Data collected include the number of household members and their country of birth, year of birth, age, sex, education, place of residence, marital status, language, and religion—and their parents' country of birth, age, citizenship, and place of residence.

A technical workshop that took place in June 2009 recommended taking into consideration the fact that different members of a household have different responsibilities. The interviewer, therefore, lists all persons who usually live and eat together in the household.

- *Module 2.* The main purpose of the housing conditions section is to collect information on characteristics of the household members' dwelling, including its ownership.
- *Module 3.* This module records information on household assets, household expenditures, and the purchase prices of several staples, goods, and services.
- *Module 4.* This small module contains questions on financial usage and access.
- *Module 5.* This covers migration information—current place of residence, reasons for moving, education level of the migrant, employment situation (pre- and postmigration), demographic characteristics, remittances behavior, channels for sending remittances, amounts sent, and so on.

Most migration in Africa is rural-to-urban and intraregional. The survey contains information on three places of residence: birthplace (from the household roster), the current place of residence, and the previous place of residence (in the migration module). For some respondents these places will coincide.

- *Module 6.* This collects migration information on nonformer household members, including their current place of residence, reasons for moving, education level, employment situation (pre- and postmigration), demographic characteristics, remittance behaviors, channels for sending remittances, amounts sent, and so on.
- *Module 7.* This module captures data on return migration. A return migrant was defined as an adult member (over 18 years old) currently living in the household, who had lived in another country or another place in Uganda for at least 3 months in the 5 years preceding the survey. The information sought in this section related to the last migration episode for each return migrant.

3.2 Some basic definitions

For the purpose of these surveys, a number of concepts and definitions were adopted during a technical workshop that convened external experts and the local research institutions of each country surveyed. Defining a household was discussed, as was measuring the time elapsed since the first migration movement. As opposed to other surveys, the African Migration and Remittances Household Surveys try to capture data on a cross-section of migrants, including those who left home a long time back. For this survey, a *migrant* is a person who used to live in a household in the country in which the interview is being conducted, but left before the interview to live abroad, or in another village or urban area within the country, for at least six months. *Remittances* include both international (cross-border) and internal (within-country) “person-to-person” transfers of resources (both money and in-kind) often sent by migrant workers. A *place of residence* is where a person normally resides and excludes short-term stays (less than 3 months) for vacations, home visits, or business, medical, or religious reasons. *Country of origin* is the country of birth.

3.3 Sampling strategies

Sampling frame and methodology

One of the biggest challenges faced when implementing the Migrant and Remittances Household Surveys was locating those relatively rare households that include migrants. McKenzie and Mistiaen (2007) note that even in countries with a high incidence of international migration, finding a household with an emigrant abroad or a returned migrant can be challenging. In migrant-receiving countries, such as South Africa, yet another challenge is households' reluctance to participate in studies of this nature. Annex 1 provides a summary of the sampling strategy implemented in each country.

Sampling Frame

It was not economically viable and cost-effective to capture data on the geographical distribution of households with international migrants. Sampling frameworks were very difficult to obtain. In a few countries, such as Senegal, it was possible to use the latest census as a framework, but in other cases the latest census had taken place more than 10 years back and could not be used to identify high-migration areas. For example, in Kenya, it was not possible to use the latest census as a framework, so the team used remittance transfer data and maps from M-PESA to identify migrant areas.

Countries that used census data and conducted national representative samples

Nigeria, Senegal, and Uganda used their population census to select provinces, districts, or other units and to conduct national representative samples. Each country, however, used a different methodology. In Nigeria and Senegal, the focus was on giving a higher probability of selection to zones and/or primary sampling units with a higher prevalence of migrants. In the case of Uganda, by contrast, the allocation was made proportional to the number of migrants in urban and rural areas, while the primary units were selected without taking into account the prevalence of migrants. As a result of these strategies, the Ugandan survey located only 249 international migrant households—far below the 800 households expected. Meanwhile, the similarly targeted sampling strategies used in Nigeria and Senegal were shown to be successful in the search for migrant households.

Countries that used other materials for frame construction

In many African countries, the censuses were too outdated to be used. In Burkina Faso, the survey team was not able to obtain a framework from the National Statistical Office. Meanwhile, Kenya was conducting a census at the time of survey implementation. Since the team had to adopt the previous census, additional materials for framework construction were used to account for population growth and migration as well as changes in administrative units (boundary changes, new districts) that had occurred since the earlier census. The Kenya Integrated Household Budget Survey (2005) data, the Financial Services Deepening Survey (2006), and the presence of remittance service providers—including M-PESA, Western Union, and Money Gram services—were also consulted while designing the frame. In addition, the Kenya National Bureau of Statistics' officers, village elders, and administrative officers helped to map out clusters where there was a higher probability of finding international migrants.

Sample design

Braw and Carletto (2008) noted that there are two alternative sampling designs that can be applied to collect information on migration.: 1) disproportionate sampling of high migration in the primary sample units (PSUs) and 2) stratified random sampling within PSUs (two stage sampling). According to the authors these two methods can either be used individually or in conjunction with one another. Bilborrow and others (1997) suggest that to find households with international migrants, it is best to conduct stratified disproportionate sampling with fractions; this is the preferred methodological strategy to be applied in surveys that try to capture international migrants. McKenzie and Mistien (2007) outline three approaches to sampling rare elements: (i) stratified sampling using disproportionate sampling fractions with two-phase sampling, (ii) snowball sampling, and (iii) time and space sampling.

One of the main tasks of each survey team was to design an effectively strategy for locating households with international migrants. In the course of the implementation of the surveys different strategies were implemented. Since not all the countries have access to national-level sampling frames, each country used a different sampling strategies. Senegal, Uganda and Nigeria results are representative of the whole nation. Burkina Faso, South Africa and Kenya are representative of the level of the unit of analysis chosen (province, state or unit).

Once the enumeration areas were selected, a two-phase sampling procedure was used. Surveying was restricted to certain provinces or districts where migrants were thought to originate. Teams in Burkina Faso and Kenya conducted the surveys only in areas with a high incidence of migration. These areas were chosen based on the 2006 population census for Burkina Faso, and 10 provinces and 78 primary sampling units were selected. In Kenya 17 districts and 92 clusters in the districts were selected. Kenya found that even in relatively high migration areas, the prevalence of migration was not going to give a high number of households with migrants if the sample is drawn randomly. This two stage sampling requires a full listing operation of the selected PSUs. This is the approach that the survey team in Kenya followed. The selection process of households involved re-listing of the households in each cluster so as to update the list of occupied households and to identify three groups of households; international migrant, internal migrants and non migrant households. Each group of these three households was treated as an independent sub-frame and random sampling was used to select households in each group. An instrument was developed to capture the basic characteristics of households at this stage including household headship, number of members, and presence and number of international or internal migrant. This allows indentifying migrant households and then selecting a sample with more households with migrants.

The sample designs had the following features:

- The information sources consulted when developing the sample designs included censuses, recent household surveys, remittance surveys, and the expert opinion of administrative personnel from the national statistical offices.
- Household samples were selected in several sampling stages, since the sampling frame included information on urban/rural classification, identification of higher-level units (districts, provinces, states, and so on), population, and other characteristics.
- The statistical aim was to generate survey data that were representative at the level of the province, region, or country. To this end, the team sought to find a representative sample of the population with a relatively homogeneous distribution across three categories (households with internal migrants, households with international migrants, and households with no migrants). Prior to the household sampling, a listing operation of selected primary units was carried out in the fieldwork areas, with the purpose of

classifying households in these three categories. Differences in the applied methodologies were mainly in the early stages of sample selection.

- Screening a sufficiently large number of households to identify households with migrants presented some challenges. For example, in urban areas around Nairobi, Kenya, it was difficult to find household members at home during the week. The team had to return to the same households on weekends to obtain information.
- Identifying households with immigrants posed a challenge in South Africa, since immigrants still feared xenophobic attacks or did not want to be identified as undocumented immigrants. To encourage households to participate in the process, there was no listing operation to determine which households had an immigrant member.

Table 3.1 summarizes the number of households surveyed and the migration status of former household members found in each survey for each country.

Table 3.1 Main sample characteristics

| Country | Level of statistical representativeness | Households screened | Target sample | Households successfully interviewed | Total number of households by migration status of former household member | | |
|--------------------------|--|---------------------|---------------|-------------------------------------|---|------------------------|-------------------|
| | | | | | Nonmigrants | International migrants | Internal migrants |
| <i>Sending country</i> | | | | | | | |
| Burkina Faso | 10 most important provinces for migration | 9,177 | 2,106 | 2,102 | 745 | 662 | 695 |
| Kenya | 17 districts with the largest concentration of household with migrants | 7,373 | 2,000 | 1,942 | 671 | 578 | 713 |
| Nigeria | National representative | 8,075 | 2,000 | 2,251 | 813 | 875 | 563 |
| Senegal | National representative | | 2,000 | 2,100 | 700 | 700 | 700 |
| Uganda | National representative | 24,618 | 2,000 | 1,961 | 1,112 | 249 | 600 |
| <i>Receiving country</i> | | | | | | | |
| South Africa | Main corridors Limpopo/Gauteng | 6,760 | 2,028 | 2,012 | | | 328 Immigrants |

Source: Authors' calculations based on results household surveys conducted in Burkina Faso, Kenya, Nigeria, Senegal, South Africa, and Uganda in 2009 as part of the Africa Migration Project

In sum, to develop appropriate sample designs in each country was challenging. These constraints were recognized in all country-specific sample designs. In Senegal, Nigeria, and Uganda the household surveys were nationally representative and applied stratified random sampling. In Kenya, Burkina Faso, and South Africa the surveys were representative of the areas selected. Annex A.1 summarizes the implementation of the stratified random sample in each country, including the methodological steps, number of primary units selected, and sample size.

3.4 Language design

The key principle was that every respondent in the household was interviewed in his or her preferred language, but this presented challenges in questionnaire preparation and field operations. In the majority of the countries surveyed, the interviewers spoke the languages of the largest ethnic language groups. For example, interviewers came from various regions of Burkina Faso and spoke at least five local languages. South Africa was the only country that translated the questionnaire into three different languages.

3.5 Fieldwork

The fieldwork in the six countries was properly organized and implemented in order to use the limited resources efficiently. The teams of interviewers recruited for each survey team were well qualified. For example, in the case of Nigeria all the interviewers had a college degree. In Burkina Faso, Nigeria, South Africa, Uganda, Senegal, and Kenya, supervisors and interviewers were trained according to the questionnaire guidelines. The survey teams encountered few difficulties in implementing the surveys. In certain cases, some respondents were not willing to give information on nonhousehold members from which they received remittances. In these cases, interviewers did not ask for the real name of the sender but only a surname. The reticence to provide information on senders of remittances was high in urban areas. In Nigeria in some instances, the survey team had some difficulty in obtaining answers to questions seeking personal (particularly financial) data. In South Africa some households refused to answer such questions, especially in highly affluent areas of both the Gauteng and Limpopo provinces.

3.6 Data entry, quality control, format, and availability

Once the fieldwork was finalized in each of the countries, the survey teams proceeded to manually control the content of the completed questionnaires to be later entered into a software

program. Prior to sending the files to the research team, local teams validated the data content. Data reported as erroneous were reviewed and corrected with the help of paper questionnaires.

Data on the questionnaires needed to be subjected to different types of checks; these typically included range checks, checks against reference data, skip checks, consistency checks, and typographic checks (Munoz 2003). This review process was monitored specifically for the following:

- Duplicate records
- Correspondence between different types of household registration (individuals, migrants, and so on)
- Undefined values for categorical variables
- Values outside the logical range for numeric variables
- Missing values beyond 5 percent identified as eligible
- Cross-consistency of information

In the process of validation and error correction, imputation was avoided in the case of missing values.

The data from the survey are available from the World Bank website. These data include the survey instrument, manuals, and methodology. The data can be downloaded as a STATA or SPSS file.

The data obtained by each survey have been anonymized by removing name fields, addresses, phone numbers, and the names of the interviewers.

3.7 Limitations of the data

There are a number of important methodological and data issues that users need to be aware of when using the data. Like all sample surveys, these migration and remittances household surveys can only produce estimates and these estimates are limited by a number of factors.

- Sample coverage – the sampling frame does not cover the whole population in all the countries.

- Sampling variability – all samples can differ from the population by chance. This is referred to as sampling error. The findings from the surveys seem to corroborate previous findings from other surveys on certain variables.
- Bias in the achieved sample – if a sample under represents sections of the population or if a large proportion of people do not answer some questions, the estimates may differ substantially from the population that are not a result of chance. For example, in Senegal, the unweighted sample is 53.8 % female in rural areas, but the true figure of the population is 52.3%. This is an example of bias caused by young males, in particular, being difficult to contact to take part in the survey since it was the harvest season at the time of the implementation of the survey.
- The surveys are also limited in the amount of detail it can collect about some topics. For example, it was not designed to provide reliable "economic" statistics (e.g. unemployment rates and average earnings).

4. Some preliminary findings

In the past, very few nationally representative household surveys have collected detailed data on migration and remittances in any Sub-Saharan African country, with the exception of the 2005–06 Ghana Living Standards Survey 5 (GLSS 5). As a result, little is known about the characteristics of households that have former and current members who are internal or international migrants or who have received internal and international remittances from former and nonformer household members. Even less is known about the age, gender, and skill composition of internal and international migrants in Africa. For these reasons, the six Household Migration and Remittances Surveys represent a unique source of information on household composition and characteristics and individual-level migration, remittance, and return migration patterns. This section provides an overview of the data captured by the six surveys.

It should be noted that not all the surveys' samples are nationally representative. Therefore, the results can only be interpreted at the level they represent (province or region).

Table 4.1 Main sample characteristics

| Country | Level of statistical representativeness | Households screened | Target sample | Households successfully interviewed | Total number of households by migration status of former household member | | |
|--------------------------|---|---------------------|---------------|-------------------------------------|---|-----------------------|-------------------|
| | | | | | Nonmigrants | International migrant | Internal migrants |
| <i>Sending country</i> | | | | | | | |
| Burkina Faso | 10 most important provinces for the migration | 9,177 | 2,106 | 2,102 | 745 | 662 | 695 |
| Kenya | 17 districts with the largest concentration of households with migrants | 7,373 | 2,000 | 1,942 | 671 | 578 | 713 |
| Nigeria | National representative | 8,075 | 2,000 | 2,251 | 813 | 875 | 563 |
| Senegal | National representative | | 2,000 | 2,100 | 700 | 700 | 700 |
| Uganda | National representative | 24,618 | 2,000 | 1,961 | 1,112 | 249 | 600 |
| <i>Receiving country</i> | | | | | | | Immigrants |
| South Africa | Main corridors Limpopo/Gauteng | 6,760 | 2,028 | 2,012 | | | 328 |

Source: Authors' calculations based on results household surveys conducted in Burkina Faso, Kenya, Nigeria, Senegal, South Africa, and Uganda in 2009 as part of the Africa Migration Project

4.1 Sociodemographic characteristics of households

Table 4.2 presents mean values on selected household-level variables for four groups of households: households with no migrants, internal migrants (mainly rural to urban or rural to rural, within the same nation), intra-African migrants, and international migrants (outside Africa). Table 4.1 indicates that those households with no migrants have the youngest household heads. On the other hand, households with international migrants have smaller household sizes. The size of the household, however, also reflects the demographic patterns in a given country. For example, high fertility levels in Burkina Faso and Senegal also explain the large household sizes.

Survey findings confirm previous findings on household sizes in Ghana and Senegal (small nuclear households in Ghana and large polygamous households in Senegal; Eurostat 2000). In Senegal the average household count was 8.7 members in nonmigrant households and 13 in migrant households.

Table 4.2 Summary data on households with and without migrants

| Household characteristics | Burkina Faso | Ghana | Nigeria | Senegal | Kenya |
|--|---------------------|--------------|----------------|----------------|--------------|
| <i>Age (head of the household)</i> | | | | | |
| Households with migrants in OECD countries | 53 | 49 | 55 | 55 | 54 |
| Households with intra-African migrants | 53 | 57 | 51 | 49 | 51 |
| Households with internal migrants | 52 | 54 | 51 | 52 | 50 |
| Households with no migrants | 46 | 44 | 45 | 52 | 41 |
| <i>Gender of head (percent male)</i> | | | | | |
| Households with migrants in OECD countries | 72 | 48 | 80 | 52 | 70 |
| Households with intra-African migrants | 93 | 58 | 82 | 65 | 55 |
| Households with internal migrants | 91 | 56 | 75 | 85 | 60 |
| Households with no migrants | 95 | 75 | 81 | 92 | 79 |
| <i>Household size</i> | | | | | |
| Households with migrants in OECD countries | 7.9 | 3.8 | 8.5 | 13 | 4.1 |
| Households with intra-African migrants | 10.1 | 4.1 | 7.5 | 12.4 | 4.5 |
| Households with internal migrants | 8.7 | 4.3 | 8.9 | 8.8 | 4.3 |
| Households with no migrants | 8.4 | 4.3 | 7.0 | 8.7 | 4.2 |

Source: Authors' calculations based on results household surveys conducted in Burkina Faso, Kenya, Nigeria, Senegal, South Africa, and Uganda in 2009 as part of the Africa Migration Project

Note: OECD = Organisation for Economic Co-operation and Development.

The Ghanaian and Kenyan households are smaller: the average size is 3.8 members for households with international migrants in the Organisation for Economic Co-operation and Development (OECD) countries and 4.3 among nonmigrant households for Ghana. For Kenya, the average size is 4.1 members for households with international migrants and 4.2 for households with no migrants.

4.2 Migrant demographics

Since data were collected for both migrant and nonmigrant households, we can compare across the two groups and across the six surveyed countries. The data from the five migrant-sending countries surveyed confirm that young men migrate the most and that most international migrants—both within and outside Africa—are male.

Table 4.3 Characteristics of migrants from select African countries

| Characteristics/destination | Burkina Faso | Ghana | Nigeria | Senegal | Kenya |
|--|--------------|--------------|--------------|-------------|--------------|
| <i>Age (middle 50 percent)</i> | | | | | |
| Migrants in OECD countries | 35 | 37 | 33 | 38 | 34 |
| Intra-African migrants | 32 | 35 | 28 | 35 | 33 |
| Internal migrants | 32 | 35 | 27 | 32 | 31 |
| <i>Gender (percent male)</i> | | | | | |
| Migrants in OECD countries | 79 | 70 | 72 | 80 | 57 |
| Intra-African migrants | 90 | 63 | 75 | 86 | |
| Internal migrants | 82 | 62 | 62 | 75 | 61 |
| <i>Education (percent with given level of education)</i> | | | | | |
| Migrants in OECD countries | 52 secondary | 61 secondary | 45 tertiary | 44 tertiary | 47secondary |
| Intra-African migrants | 65 primary | 45 secondary | 38 secondary | 48 primary | |
| Internal migrants | 45 secondary | 54 secondary | 49 secondary | 35 primary | 43 secondary |
| <i>Reason for emigration</i> | | | | | |
| Employment | 78 | .. | 48 | 48 | 54 |
| Education | 8 | .. | 29 | 29 | 38 |
| Others | 4 | .. | 4 | 3 | 2 |

Source: Authors' calculations based on results household surveys conducted in Burkina Faso, Kenya, Nigeria, Senegal, South Africa, and Uganda in 2009 as part of the Africa Migration Project
.. Negligible.

Note: OECD = Organisation for Economic Co-operation and Development.

Findings from the surveys show that migrants going to OECD countries have a higher level of education than migrants within Africa and within the same nation. In Burkina Faso, the data corroborate that the majority of migrants that go to neighboring countries only have primary education while internal migrants have secondary education. In Senegal, where the overall

educational levels are lowest, intra-African migrants and internal migrants have only primary education.

For all the countries surveyed, the main reason that migrants leave their countries is to pursue economic opportunity, followed by studying abroad, and, finally, marriage or family reasons.

In migrant-receiving countries, immigrants also move for economic reasons. Immigrants in South Africa were asked to indicate the main reason for their last move: “search for work” was the most prevalent reason, followed by “civil/conflict/war,” and then “family reasons” (table 4.4).

Table 4.4 South Africa: Reasons for moving (%)

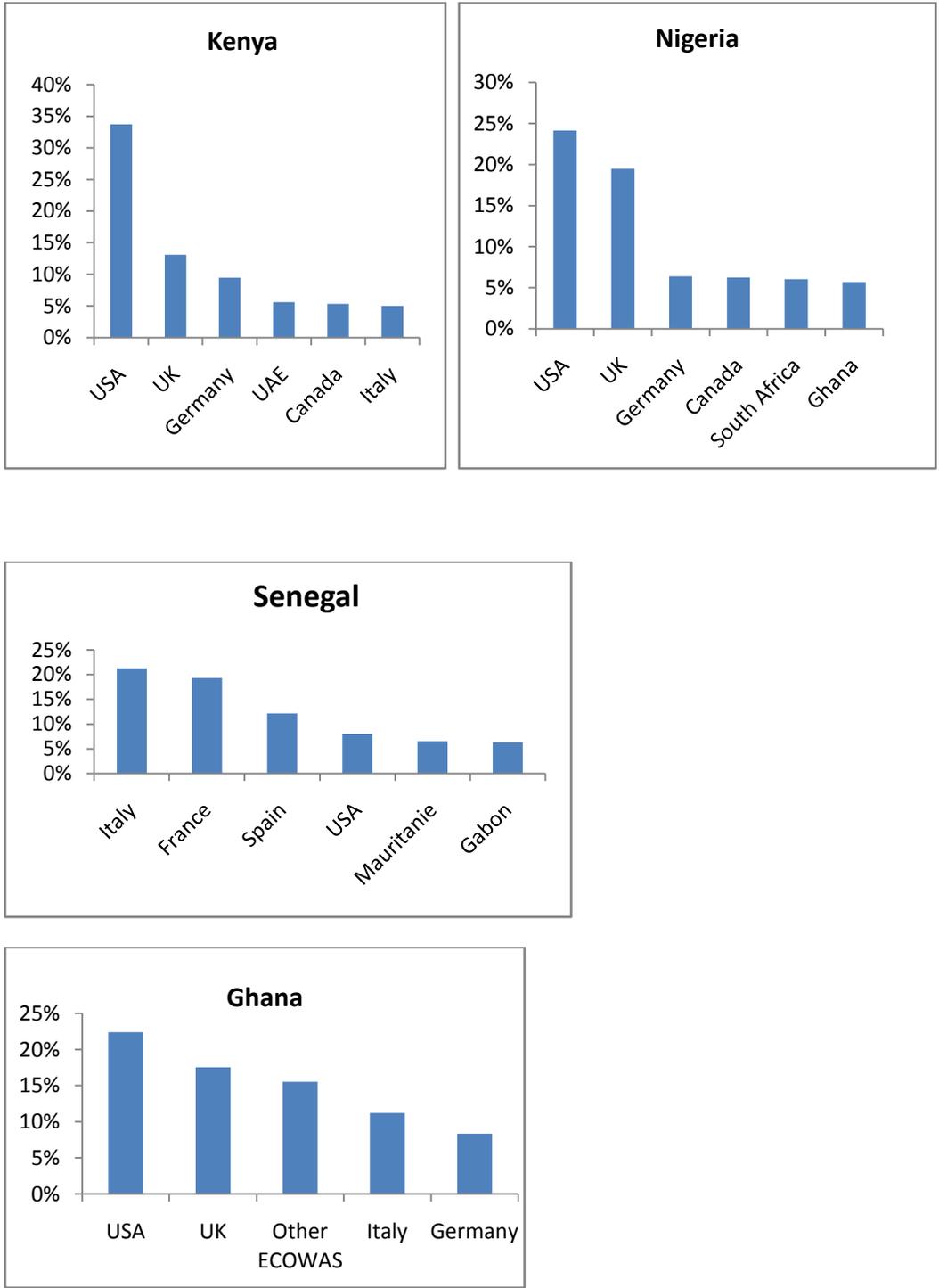
| Reasons for immigrating | Percentage (%) |
|--------------------------------|-----------------------|
| Economic | 63 |
| Conflict | 13 |
| Family | 15 |
| Education | 5 |
| Other | 2 |
| Total | 100 |

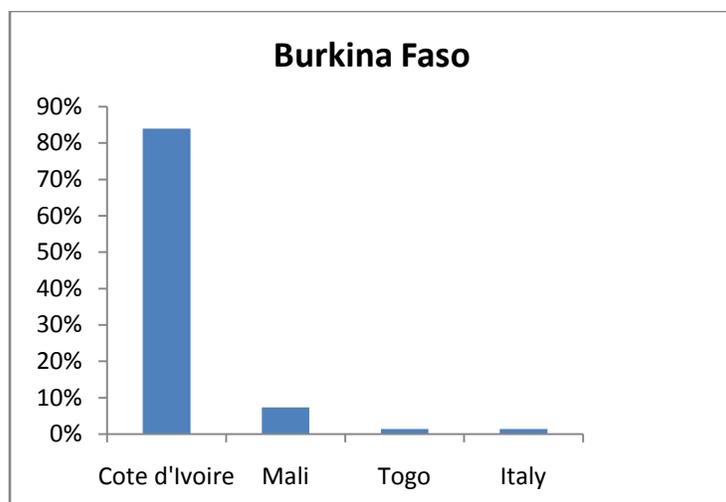
Source: Authors’ calculations based on results household surveys conducted in Burkina Faso, Kenya, Nigeria, Senegal, South Africa, and Uganda in 2009 as part of the Africa Migration Project

4.3 Countries of destination

Figure 4.1 shows the main countries of destination for each of the sending countries surveyed. In Burkina Faso there is a predominance of intraregional migration, mainly to Côte d’Ivoire and Mali. For Ghanaians, Nigerians, and Kenyans the United States and the United Kingdom are the top two destinations. Senegalese emigrants go to Italy, Spain, France, and other African countries (Mauritania and Gabon). Historical colonial ties continue to be a major factor affecting the patterns of emigration from Africa. But Italy, Qatar, Spain, and the United Arab Emirates have become new countries of destination for some African emigrants.

Figure 4.1 Main countries of destination, per migrant-sending country
 Percentage of all international migrants





Source: Authors' calculations based on results household surveys conducted in Burkina Faso, Kenya, Nigeria, Senegal, South Africa, and Uganda in 2009 as part of the Africa Migration Project
Note: ECOWAS = Economic Community of West African States.

4.4 Labor market activity of migrants

The survey data also indicate the labor-market effects of migration. In Burkina Faso migration allowed for more full-time and part-time wage activities. Nigeria, migration allowed a shift from unemployment to self-employment and wage employment. Migration appears to have various implications for women's labor-market status in these countries. In Kenya the shift in labor-market status is significant for unemployed, many of whom were able to find wage employment after migrating (table 4.5).

Table 4.5 Labor-market status of individuals from select African countries, before and after migrating, 2009

| Labor market status | (percent) | | | | | | | |
|-----------------------|--------------|-------|---------|-------|---------|-------|--------|-------|
| | Burkina Faso | | Senegal | | Nigeria | | Kenya | |
| | Before | After | Before | After | Before | After | Before | After |
| Self-employed | 80 | 64 | 42 | 43 | 16 | 26 | 7 | 9 |
| Student | 10 | 5 | 21 | 8 | 43 | 23 | 31 | 16 |
| Housewife | 3 | 5 | 9 | 8 | 1 | 5 | 2 | 3 |
| Full-time wage earner | 3 | 9 | 9 | 24 | 14 | 34 | 21 | 53 |
| Part-time wage earner | 1 | 12 | 3 | 4 | 3 | 4 | 4 | 8 |
| Unemployed | 2 | 2 | 9 | 3 | 22 | 4 | 33 | 8 |
| Other | 1 | 3 | 7 | 10 | 2 | 4 | 1 | 3 |

Source: Authors' calculations based on results household surveys conducted in Burkina Faso, Kenya, Nigeria, Senegal, South Africa, and Uganda in 2009 as part of the Africa Migration Project

Labor market activity in migrant-receiving countries

According to the numbers reported in the survey in South Africa, the majority of immigrants currently work in low-skilled occupations (Table 4.6).

Table 4.6 South Africa: Occupation and migration status (absolute numbers)

| Occupation | Migration status | | | Total |
|--|------------------|-------------------------------|--------------------------------|--------------|
| | Native | Born abroad, within Africa | Born abroad, outside Africa | |
| Managers | 242 | 31 | 7 | 280 |
| Professionals | 392 | 26 | 5 | 423 |
| Technicians and associate professionals | 129 | 13 | 2 | 144 |
| Clerical support workers | 190 | 5 | 3 | 198 |
| Service and sales workers | 294 | 47 | 3 | 344 |
| Skilled agricultural, forestry, and fishery workers | 42 | 3 | 2 | 47 |
| Craft and related trades workers | 85 | 48 | 6 | 139 |
| Plant and machine operators, and assemblers | 85 | 23 | 0 | 108 |
| Elementary occupations (for example, domestic worker, or vegetable or street vendor) | 352 | 155 | 0 | 507 |
| Armed forces occupations | 31 | 6 | 0 | 37 |
| Don't know | 20 | 5 | 1 | 26 |
| Total | 1,862 | 362 | 29 | 2,253 |

Source: Authors' calculations based on results household surveys conducted in Burkina Faso, Kenya, Nigeria, Senegal, South Africa, and Uganda in 2009 as part of the Africa Migration Project

4.5 Remittances: Uses and channels

Uses of remittances

Table 4.7 shows the uses of remittances sent by internal, intraregional (that is, within Africa), and international migrants. Households in Burkina Faso and Senegal spend a large proportion of remittances sent by international migrants on food. Remittances sent by international migrants outside Africa are spent on food, education, health, and physical investments.

Table 4.7 Use of remittances by recipient households in select African countries, by source
(percent of total remittances)

| Use | Burkina Faso | | | Kenya | | | Nigeria | | |
|----------------------------------|----------------|---------------|----------|----------------|---------------|----------|----------------|---------------|----------|
| | Outside Africa | Within Africa | Domestic | Outside Africa | Within Africa | Domestic | Outside Africa | Within Africa | Domestic |
| Construction of new house | 25.7 | 10.1 | 2.6 | 11.2 | 27.5 | 1.3 | 5.8 | 0.0 | 0.1 |
| Food | 23.5 | 34.9 | 48.7 | 12.8 | 14.5 | 29.7 | 10.1 | 20.1 | 1.0 |
| Education | 12.4 | 5.9 | 9.4 | 9.6 | 22.9 | 20.5 | 22.1 | 19.6 | 4.5 |
| Health | 11.3 | 10.1 | 12.5 | 7.3 | 5.8 | 7.0 | 5.1 | 12.0 | 10.6 |
| Business | 10.4 | 2.6 | 2.4 | 3.9 | 8.4 | 13.0 | 21.7 | 20.1 | 11.1 |
| Clothing | 5.0 | 0.7 | 0.7 | .. | .. | .. | .. | .. | .. |
| Marriage/funeral | 2.1 | 3.9 | 3.1 | 0.9 | 1.7 | 2.0 | 0.4 | 1.0 | ..7 |
| Rent (house, land) | 1.4 | 0.6 | 1.7 | 5.7 | 0.4 | 7.4 | 4.4 | 4.9 | ..8 |
| Rebuilding of house | 0.3 | 1.0 | 1.2 | 5.3 | 3.1 | 1.3 | 4.7 | 3.2 | 7.0 |
| Cars/trucks | 0.1 | 0.0 | 0.1 | 1.3 | 1.0 | 0.4 | 0.0 | 0.0 | 0.5 |
| Purchase of land | 0.0 | 1.4 | 0.1 | 8.4 | 7.0 | 1.3 | 24.8 | 16.6 | 18.2 |
| Improvement of farm ^a | 0.0 | 3.9 | 1.1 | 2.3 | 0.4 | 4.4 | .. | .. | .. |
| Investment | .. | .. | .. | 24.2 | 0.6 | 4.7 | .. | .. | .. |
| Other | 7.7 | 24.9 | 16.3 | 7.2 | 6.6 | 6.9 | 0.8 | 2.6 | 3.5 |

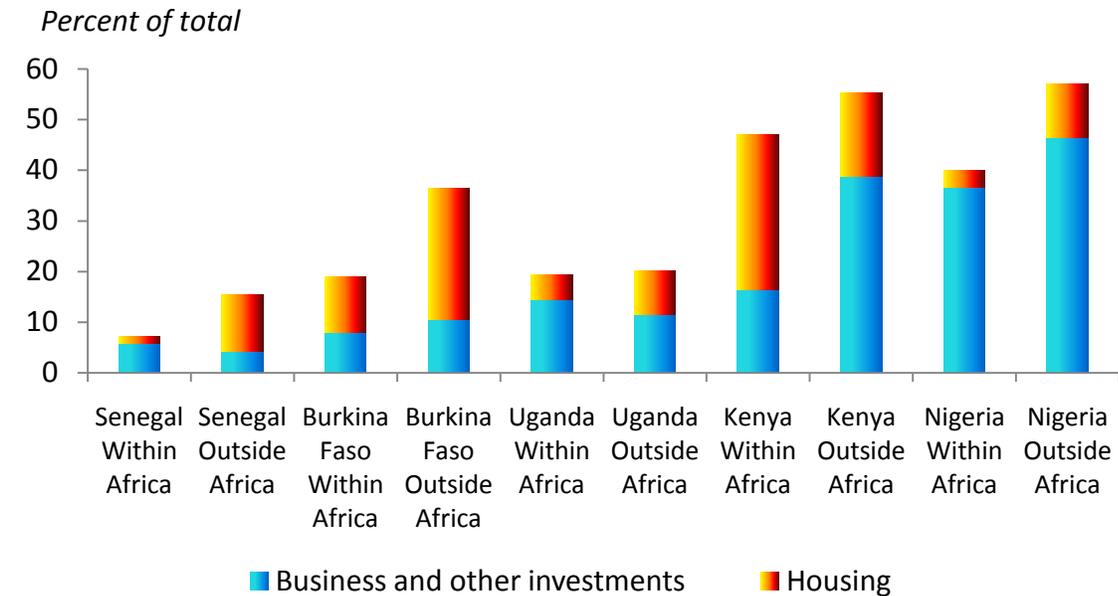
| Use | Senegal | | | Uganda | | |
|----------------------------------|----------------|---------------|----------|----------------|---------------|----------|
| | Outside Africa | Within Africa | Domestic | Outside Africa | Within Africa | Domestic |
| Construction of new house | 7.0 | 0.7 | 0.0 | 2.5 | 1.6 | 0.4 |
| Food | 52.6 | 72.6 | 81.9 | 7.6 | 9.7 | 12.4 |
| Education | 3.6 | 2.3 | 4.6 | 12.7 | 14.5 | 20.2 |
| Health | 10.7 | 7.3 | 2.9 | 6.3 | 14.5 | 24.8 |
| Business | 1.3 | 5.7 | 0.2 | 7.6 | 9.7 | 2.1 |
| Clothing | .. | .. | .. | .. | .. | .. |
| Marriage/funeral | 2.9 | 2.4 | 1.1 | 7.6 | 6.5 | 1.7 |
| Rent (house, land) | 1.0 | 0.0 | 2.2 | 5.1 | 8.1 | 4.5 |
| Rebuilding of house | 4.2 | 0.7 | 0.1 | 6.3 | 3.2 | 2.1 |
| Cars/trucks | 0.2 | 0.0 | 0.0 | 2.5 | 0.0 | 0.0 |
| Purchase of land | 3.0 | 0.0 | 0.0 | 3.8 | 4.8 | 2.1 |
| Improvement of farm ^a | .. | .. | .. | .. | .. | .. |
| Investment | .. | .. | .. | .. | .. | .. |
| Other | 13.5 | 8.3 | 6.9 | 38.0 | 27.4 | 29.8 |

Source: Authors' calculations based on results household surveys conducted in Burkina Faso, Kenya, Nigeria, Senegal, South Africa, and Uganda in 2009 as part of the Africa Migration Project .. Negligible.

^{a.} Includes agricultural equipment.

Many migrants transfer funds to households in origin countries for the purpose of investment. Data from household surveys reveal that households receiving international remittances from OECD countries have been making productive investments in land, housing, businesses, farm improvements, agricultural equipment, and so on (36 percent in Burkina Faso, 55 percent in Kenya, 57 percent in Nigeria, 15 percent in Senegal, and 20 percent in Uganda; see figure 4.2). Households receiving transfers from other African countries are also investing a significant share in business activities, housing, and other investments in Kenya (47 percent), Nigeria (40 percent), Uganda (19.3 percent), and Burkina Faso (19.0 percent).

Figure 4.2 Investments in business and housing funded by remittances from within and outside Africa



Source: Authors' calculations based on results household surveys conducted in Burkina Faso, Kenya, Nigeria, Senegal, South Africa, and Uganda in 2009 as part of the Africa Migration Project

Note: "Other investments" include purchases of land, livestock, and agricultural equipment and investment in agriculture.

Channels for remittances

Internal remittances

Internal migrants generally send remittances by way of friends or relatives—or carry the money themselves on visits home. The situation is different in Kenya, however, where the use of M-PESA agencies is highly used. About 60 percent of Kenyan internal migrants reported the use of mobile transfers as a main channel for sending remittances (table 4.8)

Source: Authors' calculations based on results household surveys conducted in Burkina Faso, Kenya, Nigeria, Senegal, South Africa, and Uganda in 2009 as part of the Africa Migration Project

Table 4.8 Channels used to send internal remittances

| Percentage Channel | Channels of Remittances - Internal Migrants | | | | |
|--|---|-------|-------|---------|---------|
| | Burkina Faso | Ghana | Kenya | Nigeria | Senegal |
| Western Union | 1 | 0 | 1 | 3 | 5 |
| Money Gram | 0 | 0 | 1 | 2 | 0 |
| Other money transfer operator (MTO) | 0 | 0 | 0 | 2 | 0 |
| Postal money order | 1 | 0 | 1 | 0 | 3 |
| Direct transfer to bank account | 0 | 1 | 6 | 35 | 0 |
| Bank as paying agent for MTO | 0 | 0 | 1 | 3 | 0 |
| Foreign exchange bureau | 0 | 0 | 1 | 0 | 0 |
| Credit union | 0 | 0 | 0 | 0 | 0 |
| Travel agency | 1 | 0 | 0 | 0 | 0 |
| Informal individual agents | 1 | 0 | 0 | 4 | 3 |
| Mobile phone/telecom service providers | 0 | 0 | 60 | 0 | 1 |
| Through friend or relative | 27 | 44 | 7 | 21 | 37 |
| Courier, bus, or other transport | 3 | 0 | 1 | 0 | 12 |
| Brought back himself during visit | 63 | 50 | 21 | 28 | 37 |
| Pre paid cards/ATM card | 0 | 0 | 0 | 0 | 0 |
| Internet money transfer | 0 | 0 | 0 | 0 | 0 |
| Other | 1 | 5 | 1 | 1 | 2 |
| Total | 100 | 100 | 100 | 100 | 100 |

Source: Authors' calculations based on results household surveys conducted in Burkina Faso, Kenya, Nigeria, Senegal, South Africa, and Uganda in 2009 as part of the Africa Migration Project

Cross-border remittances within Africa

Migrant workers in Africa generally transfer their remittances mainly through informal channels. Sending money through friends and bringing back money during visits is still the most important channel. In all six countries, surveys reported that remittance service providers (Western Union and Money Gram) are a channel for sending remittances. Kenyans and Nigerians sending remittances from within Africa used the banking system as a channel to transfer money. Kenya also reported the use of mobile phone and telecommunication providers as an important way to transfer money.

Table 4.9 Channels used to send remittances within Africa

| Channel | Channels of remittances—Within-Africa migrants (%) | | | | |
|--|--|------------|------------|------------|------------|
| | Burkina Faso | Ghana | Kenya | Nigeria | Senegal |
| Western Union | 10 | 17 | 24 | 31 | 30 |
| Money Gram | 1 | 6 | 12 | 3 | 1 |
| Other money transfer operator (MTO) | 0 | 0 | 2 | 1 | 0 |
| Postal money order | 3 | 0 | 2 | 1 | 6 |
| Direct transfer to bank account | 0 | 0 | 11 | 12 | 0 |
| Bank as paying agent for MTO | 0 | 0 | 1 | 18 | 0 |
| Foreign exchange bureau | 0 | 0 | 2 | 1 | 0 |
| Credit union | 0 | 0 | 0 | 0 | 0 |
| Travel agency | 0 | 0 | 0 | 0 | 0 |
| Informal individual agents | 3 | 0 | 3 | 4 | 4 |
| Mobile phone/telecom service providers | 0 | 0 | 24 | 0 | 0 |
| Through friend or relative | 64 | 43 | 9 | 15 | 41 |
| Courier, bus, or other transport | 3 | 0 | 4 | 0 | 1 |
| Brought back himself during visit | 15 | 30 | 8 | 13 | 14 |
| Prepaid cards/ATM card | 0 | 0 | 0 | 0 | 0 |
| Internet money transfer | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 4 | 0 | 0 | 2 |
| Total | 100 | 100 | 100 | 100 | 100 |

Source: Authors' calculations based on results household surveys conducted in Burkina Faso, Kenya, Nigeria, Senegal, South Africa, and Uganda in 2009 as part of the Africa Migration Project .

International cross-border remittances

Table 4.10 shows that international migrants working outside of Africa remit more through formal channels. Money-transfer companies are the main channel to send money from outside Africa. The role of friends is still important but not in the same proportion as for internal and intraregional remittances. Sending money through mobile phones is not a channel represented in the survey when the money is sent from outside Africa.

Table 4.10 Channels used to send international remittances

| Channel | Channels of remittances—OECD migrants | | | | |
|--|---------------------------------------|---------------|---------------|---------------|---------------|
| | Burkina Faso | Ghana | Kenya | Nigeria | Senegal |
| Western Union | 32 | 54 | 43 | 51 | 74 |
| Money Gram | 9 | 6 | 20 | 5 | 6 |
| Other money transfer operator (MTO) | 2 | 14 | 1 | 0 | 2 |
| Postal money order | 0 | 0 | 1 | 0 | 3 |
| Direct transfer to bank account | 0 | 2 | 8 | 12 | 0 |
| Bank as paying agent for MTO | 2 | 0 | 8 | 11 | 1 |
| Foreign exchange bureau | 0 | 0 | 7 | 0 | 0 |
| Credit union | 0 | 0 | 0 | 0 | 1 |
| Travel agency | 0 | 0 | 1 | 0 | 0 |
| Informal individual agents | 0 | 0 | 1 | 2 | 2 |
| Mobile phone/telecom service providers | 0 | 0 | 2 | 0 | 0 |
| Through friend or relative | 18 | 18 | 4 | 13 | 10 |
| Courier, bus, or other transport | 0 | 0 | 0 | 0 | 0 |
| Brought back himself during visit | 34 | 4 | 2 | 5 | 1 |
| Pre-paid cards/ATM card | 0 | 0 | 0 | 0 | 0 |
| Internet money transfer | 0 | 0 | 0 | 0 | 0 |
| Other | 2 | 2 | 0 | 0 | 0 |
| Total | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

Source: Authors' calculations based on results household surveys conducted in Burkina Faso, Kenya, Nigeria, Senegal, South Africa, and Uganda in 2009 as part of the Africa Migration Project.

4.6 Return migration

The survey data show low rates of return migration: the share of emigrants who returned was only 3 percent in Nigeria, 9 percent in Senegal, and 25 percent in Burkina Faso (table 4.11). The majority of those who returned to Burkina Faso and Nigeria came back in less than four years. In contrast, in Senegal two-thirds of returnees had spent 15 or more years abroad.¹

Table 4.11 Return migration in select African countries

| | (percent) | | |
|-----------------------------------|---------------------|----------------|----------------|
| Item | Burkina Faso | Nigeria | Senegal |
| Returnees as a share of migrants | 25 | 3 | 9 |
| <i>of which:</i> | | | |
| Returned in less than 4 years | 67 | 69 | 32 |
| Returned in 5–15 years | 16 | 23 | 2 |
| Returned after more than 15 years | 16 | 8 | 66 |

Source: Authors' calculations based on results household surveys conducted in Burkina Faso, Kenya, Nigeria, Senegal, South Africa, and Uganda in 2009 as part of the Africa Migration Project

5. Final assessment and conclusions

The six Migration and Remittances Household Surveys conducted as part of the Africa Migration Project are an important source of detailed information on migration and international remittances in Africa. These include five migrant-sending countries and one migrant-receiving country. The data contain a series of demographic, economic, migration, and remittance variables.

The data promise to be a vital contribution to the research community. They will allow for comparative studies across countries, since the questionnaires were standardized and the surveys were implemented in roughly the same period as one another.

1. See Azam and Gubert (2005) for discussion of the pattern of migration in rural Senegal.

Due to time and cost constraints, the survey instrument does not contain questions capturing some data relevant to migration and remittances, such as that on migrant networks migrant history, and child labor. The coverage of the sample is not optimal in all the countries, but at least it can provide a picture—previously missing—of the migration and remittance patterns in certain areas.

The six household surveys will contribute to the analysis of migration issues and will facilitate policy formulation. Another unique aspect of the household surveys is that they were conducted by local research institutions in Africa.

Given the questionnaires, training modules, and sampling strategies, more countries can implement migration and remittances household surveys using the same methodology.

Annex A.1 Sampling methodology

| Country | Burkina Faso | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|---------|-------------------|------------|----|---------|---|---------|---|---------|---|------------|---|------------|---|-------|---|--------|---|-----|---|---------|---|--------------|-----------|
| Population | All households in the 10 provinces which account for the largest concentration of households with migrants | | | | | | | | | | | | | | | | | | | | | | | | |
| Sampling frame | <input checked="" type="checkbox"/> | | | | | | | | | | | | | | | | | | | | | | | | |
| Domains of survey | All the villages and urban areas located in the 10 provinces which are the primary sampling units of this survey. Households with international migrants, households with international migrants, and households without migrants. | | | | | | | | | | | | | | | | | | | | | | | | |
| Stratus | 10 selected provinces | | | | | | | | | | | | | | | | | | | | | | | | |
| Number of primary units selected | 78 | | | | | | | | | | | | | | | | | | | | | | | | |
| Sampling allocation | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Strates</th> <th style="text-align: center;">Nombre de DR tiré</th> </tr> </thead> <tbody> <tr> <td>Sanmatenga</td> <td style="text-align: center;">24</td> </tr> <tr> <td>Yatenga</td> <td style="text-align: center;">9</td> </tr> <tr> <td>Passoré</td> <td style="text-align: center;">6</td> </tr> <tr> <td>Boulgou</td> <td style="text-align: center;">8</td> </tr> <tr> <td>Boulkiemdé</td> <td style="text-align: center;">6</td> </tr> <tr> <td>Namentenga</td> <td style="text-align: center;">6</td> </tr> <tr> <td>Banwa</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Sourou</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Tuy</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Kadiogo</td> <td style="text-align: center;">4</td> </tr> <tr> <td>Total</td> <td style="text-align: center;">78</td> </tr> </tbody> </table> | Strates | Nombre de DR tiré | Sanmatenga | 24 | Yatenga | 9 | Passoré | 6 | Boulgou | 8 | Boulkiemdé | 6 | Namentenga | 6 | Banwa | 5 | Sourou | 5 | Tuy | 5 | Kadiogo | 4 | Total | 78 |
| Strates | Nombre de DR tiré | | | | | | | | | | | | | | | | | | | | | | | | |
| Sanmatenga | 24 | | | | | | | | | | | | | | | | | | | | | | | | |
| Yatenga | 9 | | | | | | | | | | | | | | | | | | | | | | | | |
| Passoré | 6 | | | | | | | | | | | | | | | | | | | | | | | | |
| Boulgou | 8 | | | | | | | | | | | | | | | | | | | | | | | | |
| Boulkiemdé | 6 | | | | | | | | | | | | | | | | | | | | | | | | |
| Namentenga | 6 | | | | | | | | | | | | | | | | | | | | | | | | |
| Banwa | 5 | | | | | | | | | | | | | | | | | | | | | | | | |
| Sourou | 5 | | | | | | | | | | | | | | | | | | | | | | | | |
| Tuy | 5 | | | | | | | | | | | | | | | | | | | | | | | | |
| Kadiogo | 4 | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 78 | | | | | | | | | | | | | | | | | | | | | | | | |
| Sample size | 2, 106 households (78*27) | | | | | | | | | | | | | | | | | | | | | | | | |
| Sampling design | <input checked="" type="checkbox"/> A survey with a selection of primary units in geographic strata in the first phase and selection of households in strata according to the domains of study within each PSU. | | | | | | | | | | | | | | | | | | | | | | | | |
| Household listing | All the households selected in the village were listed and an average of 120 households in selected urban areas. Then classified them according to the domains of the survey. A light survey was conducted to identify the households with migrants and no migrants. | | | | | | | | | | | | | | | | | | | | | | | | |

| Country | Kenya | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|--|-------|-------|-------|------|---|---|---------|---|---|----------|---|---|--------|---|---|--------|---|---|-------|---|---|--------|---|---|----------|---|---|---------|---|---|--------|---|---|---------|--|---|---------|--|----|--------|---|---|-----------|---|---|-------|---|---|-------|---|---|--------|---|---|-------|----|----|
| Population | All the households in 17 districts that contain the largest number of households receiving transfers (internal or international remittances) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sampling frame | primary sampling units (PSUs) which are the clusters developed during the 1999 census. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Domains of survey | Households with international migrants, households with internal migrants, and households without migrants. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stratus | Districts by urban and rural sectors | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Number of primary units selected | 91 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sampling allocation | <table border="1"> <thead> <tr> <th></th> <th>Rural</th> <th>urban</th> </tr> </thead> <tbody> <tr><td>Embu</td><td>4</td><td>1</td></tr> <tr><td>Garissa</td><td>1</td><td>4</td></tr> <tr><td>Kakamega</td><td>3</td><td>2</td></tr> <tr><td>Kiambu</td><td>4</td><td>1</td></tr> <tr><td>Kilifi</td><td>1</td><td>4</td></tr> <tr><td>Kisii</td><td>3</td><td>2</td></tr> <tr><td>Lugari</td><td>3</td><td>2</td></tr> <tr><td>Machakos</td><td>3</td><td>2</td></tr> <tr><td>Malindi</td><td>3</td><td>2</td></tr> <tr><td>Migori</td><td>4</td><td>1</td></tr> <tr><td>Mombasa</td><td></td><td>6</td></tr> <tr><td>Nairobi</td><td></td><td>10</td></tr> <tr><td>Nakuru</td><td>3</td><td>2</td></tr> <tr><td>Rachuonyo</td><td>4</td><td>1</td></tr> <tr><td>Siaya</td><td>4</td><td>1</td></tr> <tr><td>Thika</td><td>3</td><td>2</td></tr> <tr><td>Vihiga</td><td>3</td><td>2</td></tr> <tr><td>Total</td><td>46</td><td>45</td></tr> </tbody> </table> | | Rural | urban | Embu | 4 | 1 | Garissa | 1 | 4 | Kakamega | 3 | 2 | Kiambu | 4 | 1 | Kilifi | 1 | 4 | Kisii | 3 | 2 | Lugari | 3 | 2 | Machakos | 3 | 2 | Malindi | 3 | 2 | Migori | 4 | 1 | Mombasa | | 6 | Nairobi | | 10 | Nakuru | 3 | 2 | Rachuonyo | 4 | 1 | Siaya | 4 | 1 | Thika | 3 | 2 | Vihiga | 3 | 2 | Total | 46 | 45 |
| | Rural | urban | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Embu | 4 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Garissa | 1 | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kakamega | 3 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kiambu | 4 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kilifi | 1 | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kisii | 3 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lugari | 3 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Machakos | 3 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Malindi | 3 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Migori | 4 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mombasa | | 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nairobi | | 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nakuru | 3 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rachuonyo | 4 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Siaya | 4 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thika | 3 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vihiga | 3 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 46 | 45 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sample size | 2,184 households (91*24) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sampling design | Cluster survey with a selection of primary units in geographic strata in the first phase and selection of households in strata according to the domains of study within each PSU. It listed all the households in the PSUs are selected and classified according to the domains of study via a survey conducted in light all the households in the selected PSUs. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Household listing | It listed all the households in the PSUs are selected and classified according to the domains of study via a survey conducted in light all the households in the selected PSUs. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Country | Nigeria | | | | | | | | | | | | |
|---|--|---------|-------------------|----------------------|----|----------------------|----|---------------------|---|---------------------|---|--------------|-----------|
| Population | All households in the country | | | | | | | | | | | | |
| Sampling frame | All the PSUs according to the 2006 National Population Census. | | | | | | | | | | | | |
| Domains of survey | Households with international migrants, households with internal migrants, and households without migrants. | | | | | | | | | | | | |
| Stratus | Areas with high and low migration rates in rural and sector zones | | | | | | | | | | | | |
| Number of primary units selected | 60 | | | | | | | | | | | | |
| Sampling allocation | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Strates</th> <th style="text-align: center;">Nombre de DR tiré</th> </tr> </thead> <tbody> <tr> <td>High migration urban</td> <td style="text-align: center;">36</td> </tr> <tr> <td>High migration rural</td> <td style="text-align: center;">36</td> </tr> <tr> <td>Low migration urban</td> <td style="text-align: center;">9</td> </tr> <tr> <td>Low migration rural</td> <td style="text-align: center;">9</td> </tr> <tr> <td>TOTAL</td> <td style="text-align: center;">90</td> </tr> </tbody> </table> | Strates | Nombre de DR tiré | High migration urban | 36 | High migration rural | 36 | Low migration urban | 9 | Low migration rural | 9 | TOTAL | 90 |
| Strates | Nombre de DR tiré | | | | | | | | | | | | |
| High migration urban | 36 | | | | | | | | | | | | |
| High migration rural | 36 | | | | | | | | | | | | |
| Low migration urban | 9 | | | | | | | | | | | | |
| Low migration rural | 9 | | | | | | | | | | | | |
| TOTAL | 90 | | | | | | | | | | | | |
| Sample size | 2,040 households (90*34) | | | | | | | | | | | | |
| Sampling design | Cluster survey in four stages | | | | | | | | | | | | |
| Household listing | All the households in the PSUs selected were listed. Then they were classified into the three stratum using a light survey conducted to the households in the selected PSUs. | | | | | | | | | | | | |
| Methodological steps | <ul style="list-style-type: none"> - Classification of states in high and low migration based on prior information. - Of the states classified as high migration were selected 12 and the low migration 6, both with probability proportional to size, using the population as a measure of this. - Within the states were randomly chosen proportionate to the size of the state. Local Governments at two high-LG by state for migration and a low migration. Subsequently decided to expand by 50% the sample of LG. - Random selection of two enumeration area for each LG - List of households in 90 PSUs in the sample households classified listings in three layers, namely households with international migrants, households with internal migrants and households without migrants. - Selection of households within each stratum, PSUs by systematic sampling at 12 internacionales migrant households, 12 internal migrant households and 10 households without migrants. | | | | | | | | | | | | |

| Country | Senegal | | | | | | | | | | | | | | | | |
|---|--|---------|-------------------|-----------------------|----|------------------------|---|--|----|---|----|-----------------------|----|------------------------|----|--------------|------------|
| Population | All the households in the country | | | | | | | | | | | | | | | | |
| Sampling frame | All PSUs found in the Recensement Général de la population de 2002 | | | | | | | | | | | | | | | | |
| Domains of survey | Households with international migrants, households with internal migrants and household without migrants. | | | | | | | | | | | | | | | | |
| Stratus | Dakar city high migration, Dakar city low migration, Other urban cities with high migration, Other urban cities low migration, Rural areas high migration, Rural areas low migration | | | | | | | | | | | | | | | | |
| Number of primary units selected | 100 | | | | | | | | | | | | | | | | |
| Sampling allocation | <table border="1"> <thead> <tr> <th>Strates</th> <th>Nombre de DR tiré</th> </tr> </thead> <tbody> <tr> <td>Dakar forte migration</td> <td>21</td> </tr> <tr> <td>Dakar faible migration</td> <td>9</td> </tr> <tr> <td>Autres centres urbains forte migration</td> <td>24</td> </tr> <tr> <td>Autres centres urbains faible migration</td> <td>11</td> </tr> <tr> <td>Rural forte migration</td> <td>24</td> </tr> <tr> <td>Rural faible migration</td> <td>11</td> </tr> <tr> <td>TOTAL</td> <td>100</td> </tr> </tbody> </table> | Strates | Nombre de DR tiré | Dakar forte migration | 21 | Dakar faible migration | 9 | Autres centres urbains forte migration | 24 | Autres centres urbains faible migration | 11 | Rural forte migration | 24 | Rural faible migration | 11 | TOTAL | 100 |
| Strates | Nombre de DR tiré | | | | | | | | | | | | | | | | |
| Dakar forte migration | 21 | | | | | | | | | | | | | | | | |
| Dakar faible migration | 9 | | | | | | | | | | | | | | | | |
| Autres centres urbains forte migration | 24 | | | | | | | | | | | | | | | | |
| Autres centres urbains faible migration | 11 | | | | | | | | | | | | | | | | |
| Rural forte migration | 24 | | | | | | | | | | | | | | | | |
| Rural faible migration | 11 | | | | | | | | | | | | | | | | |
| TOTAL | 100 | | | | | | | | | | | | | | | | |
| Sample size | 2,100 hogares. | | | | | | | | | | | | | | | | |
| Sampling design | Cluster survey with a selection of primary units in geographic strata in the first stage and selection of households in strata according to the domains of study within each PSU. | | | | | | | | | | | | | | | | |
| Household listing | Listed all the households in the selected PSUs and classified according to the domains of study via a light survey conducted in all the households in the selected PSUs. | | | | | | | | | | | | | | | | |
| Methodological steps | <ul style="list-style-type: none"> - Classification of primary sampling units of the sampling frame according to the percentage of households with migrants, defined as those with strong migration by 25% or more of households with migrants and migration down to the PSUs with less than 25% households with migrants. - random selection with probability proportional to size, using the number of Housing as a measure of it within six strata defined according to previously established distribution. - List of homes in the 100 PSUs in the sample households classified listings in three layers, namely households with international migrants, households with internal migrants and households without migrants. - Selection of households within each stratum, PSUs by systematic sampling at a rate of 7 households per stratum.- | | | | | | | | | | | | | | | | |

| Country | South Africa | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|--|------------|----------|------------|---------|---|---|---|---|---|---|---|-----|-------|-----|---------|---|----|---|----|---|----|---|----|-------|-----|-------|---|----|---|----|---|-----|---|-----|-------|-----|
| Population | Households of Gauteng and Limpopo. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sampling frame | All enumeration areas in the provinces of Gauteng and Limpopo. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Domains of survey | Households with immigrants, households with migrants and households with no migrants. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stratus | Gauteng y Limpopo. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Number of primary units selected | 334 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sampling distribution | <table border="1"> <thead> <tr> <th>Province</th> <th>Quartile</th> <th>Sample EAs</th> </tr> </thead> <tbody> <tr> <td rowspan="5">Gauteng</td> <td>1</td> <td>0</td> </tr> <tr> <td>2</td> <td>3</td> </tr> <tr> <td>3</td> <td>7</td> </tr> <tr> <td>4</td> <td>157</td> </tr> <tr> <td>Total</td> <td>167</td> </tr> <tr> <td rowspan="5">Limpopo</td> <td>1</td> <td>17</td> </tr> <tr> <td>2</td> <td>47</td> </tr> <tr> <td>3</td> <td>93</td> </tr> <tr> <td>4</td> <td>10</td> </tr> <tr> <td>Total</td> <td>167</td> </tr> <tr> <td rowspan="5">Total</td> <td>1</td> <td>17</td> </tr> <tr> <td>2</td> <td>50</td> </tr> <tr> <td>3</td> <td>100</td> </tr> <tr> <td>4</td> <td>167</td> </tr> <tr> <td>Total</td> <td>334</td> </tr> </tbody> </table> | Province | Quartile | Sample EAs | Gauteng | 1 | 0 | 2 | 3 | 3 | 7 | 4 | 157 | Total | 167 | Limpopo | 1 | 17 | 2 | 47 | 3 | 93 | 4 | 10 | Total | 167 | Total | 1 | 17 | 2 | 50 | 3 | 100 | 4 | 167 | Total | 334 |
| Province | Quartile | Sample EAs | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Gauteng | 1 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 2 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 3 | 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 4 | 157 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Total | 167 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Limpopo | 1 | 17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 2 | 47 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 3 | 93 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 4 | 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Total | 167 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 1 | 17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 2 | 50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 3 | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 4 | 167 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Total | 334 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sample size | 2,004 households (334*6) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sampling design | Cluster survey with a selection of primary units in geographic strata in a first stage and households selected by systematic step in a second stage. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Household listing | There was no listing operation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Methodological steps | <ul style="list-style-type: none"> - Classification of "migration intensity" of each enumeration area of the two provinces on the basis of information from different sources - Random selection of EAs within each province with probability proportional to size, using the "intensity of migration" as a measure of that within strata defined. - Quick Count housing - Determination of housing selection step - Select random starting point - Selection of households to be interviewed | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Country | Uganda | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|---------------|--------------|--------------|---------|----|----|---------|----|----|----------|----|----|---------|----|----|---------------------|-----------|------------|
| Population | The study population shall comprise of the entire population of Uganda. | | | | | | | | | | | | | | | | | | |
| Sampling frame | The 2002 population and housing census provides a frame for sample selection. | | | | | | | | | | | | | | | | | | |
| Domains of survey | Households with international migrants, households with internal migrants and household without migrants. | | | | | | | | | | | | | | | | | | |
| Stratus | Central urban, Central rural, Eastern urban, Eastern rural, Northern urban, Northern rural, Western urban, and Western rural. | | | | | | | | | | | | | | | | | | |
| Number of primary units selected | 200 | | | | | | | | | | | | | | | | | | |
| Sampling allocation | <table border="1"> <thead> <tr> <th>Region</th> <th>Urban</th> <th>Rural</th> </tr> </thead> <tbody> <tr> <td>Central</td> <td>56</td> <td>26</td> </tr> <tr> <td>Eastern</td> <td>13</td> <td>29</td> </tr> <tr> <td>Northern</td> <td>10</td> <td>23</td> </tr> <tr> <td>Western</td> <td>13</td> <td>29</td> </tr> <tr> <td>Total sample</td> <td>93</td> <td>107</td> </tr> </tbody> </table> | Region | Urban | Rural | Central | 56 | 26 | Eastern | 13 | 29 | Northern | 10 | 23 | Western | 13 | 29 | Total sample | 93 | 107 |
| Region | Urban | Rural | | | | | | | | | | | | | | | | | |
| Central | 56 | 26 | | | | | | | | | | | | | | | | | |
| Eastern | 13 | 29 | | | | | | | | | | | | | | | | | |
| Northern | 10 | 23 | | | | | | | | | | | | | | | | | |
| Western | 13 | 29 | | | | | | | | | | | | | | | | | |
| Total sample | 93 | 107 | | | | | | | | | | | | | | | | | |
| Sample size | 2,000 households (200*10) | | | | | | | | | | | | | | | | | | |
| Sampling design | Cluster survey with a selection of primary units in geographic strata in the first phase and selection of households in strata according to the domains of study within each PSU. | | | | | | | | | | | | | | | | | | |
| Household listing | It listed all the households in the PSUs are selected and classified according to the domains of study via a survey conducted in light all the households in the selected PSUs. | | | | | | | | | | | | | | | | | | |
| Methodological steps | <ul style="list-style-type: none"> - Random selection of PSUs with probability proportional to size, using the number of Housing as a measure of this within eight strata defined according to previously established distribution. The distribution of the number of PSUs to select in the urban or rural was based on the distribution of internal migrants, according to information available in the statistical office of Uganda. - List of homes in the 200 PSUs in the sample households classified listings in three layers, namely households with international migrants, households with internal migrants and households without migrants. - Selection of households within each stratum, PSUs by systematic sampling at 4 homes for stratum of international migrants, 3 homes for the layer of internal migrants and 3 homes for the stratum of households without migrants. | | | | | | | | | | | | | | | | | | |

References

- Azam, Jean-Paul & Gubert, Flore, 2005. "Migrant Remittances and Economic Development in Africa: A Review of Evidence," IDEI Working Papers 354, Institut d'Économie Industrielle (IDEI), Toulouse.
- Bilsborrow, R. E. 2007. "Surveys of International Migration: Issues and Tips." Paper presented at the Sixth Coordination Meeting on International Migration United Nations, New York, 1–5. http://www.un.org/esa/population/meetings/sixthcoord2007/Bilsborrow_paper.pdf.
- Bilsborrow, Richard, Graeme Hugo, A. S. Oberai, and Hania Zlotnick. 1997. *International Migration Statistics: Guidelines for Improving Data Collection Systems*. Geneva: International Labour Organization.
- Carletto, C and Alan de Braw. 2008. Measuring Migration using Household Surveys. Migration Operational Vehicle Note 2. The World Bank. Washington D.C.
- Eurostat, .2000. *Push and Pull Factors of International Migration: A Comparative Report*. European Community. Luxembourg.
- Lucas, Robert E. B. 1993. "Internal Migration in Developing Countries." In *Handbook of Population and Family Economics*, ed. M. R. Rosenzweig and O. Stark, vol. 1, chap. 13, 721–98. Elsevier
- Lucas, Robert E. B. 2000. "Migration." In *Designing Household Survey Questionnaires for Developing Countries: Lessons from 15 Years of the Living Standards Measurement Study, Volume 2*, ed. M. Grosh and P. Glewwe, 49–82. World Bank: Washington, DC.
- McKenzie, David J., and Johan Mistien. 2007. "Surveying Migrant Households: A Comparison of Census-Based, Snowball, and Intercept Point Surveys." <http://siteresources.worldbank.org/INTMIGDEV/Resources/2838212-1160686302996/mckenziemistiaen.pdf>.
- Muñoz, Juan. 2007. "Sampling: What You Don't Know Can Hurt You." Presentation at the Multi-topic Household Survey course, World Bank, Washington, DC, January 2007.
- Thorogood, D. 2005. "Migration Statistics in Europe—The Effects of Differences in Concepts and Definitions." Paper presented at CEIES Seminar: Migration Statistics—Social and Economic Impacts with Respect to Labour Market, Riga, 14–24.
- World Bank. 2005. *Global Economic Prospects 2006: Economic Implications of Remittances and Migration*. World Bank: Washington, DC.