

MIGRATION AND DEVELOPMENT:

A WORLD IN MOTION

Fieldwork Report Burundi:

Methodology and Sampling

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Project background

The migration and development project in Burundi is part of the *Migration and Development: A World in Motion* project, financed by the Dutch ministry of Foreign Affairs (IS Academy on Migration and Development) and carried out by the Maastricht Graduate School of Governance, Maastricht University, the Netherlands. This project focuses on migration and development processes in four migrant-sending countries: Afghanistan, Burundi, Ethiopia, and Morocco. The Netherlands is chosen as the migrant-receiving country. The main aim of the research project is to better understand the relationship between migration and development processes in order to stimulate new approaches to development. This project will contribute to existing knowledge on the migration and development nexus by collecting innovative data and providing evidence-based policy advices for the both the Dutch government and policy makers in migrant-sending countries. For more details see:

www.maastrichtuniversity.nl/web/Schools/MGSoG/ProjectPages/ISAcademieMigrationDevelopment.html



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1. Introduction

The Migration and Development project in Burundi is part of the *IS Academy: Migration and Development: A World in Motion* project. This project is implemented by the Maastricht Graduate School of Governance, Maastricht University (and its partners) and financed by the Dutch Ministry of Foreign Affairs. This five-year project, which was launched in 2009, investigates the relationship between migration and development through the collection of data in Afghanistan, Burundi, Ethiopia, and Morocco as well as data on migrants from these countries currently living in the Netherlands. The information collected will help guide more robust, evidence-based migration and development policy in the future. Within this project there are five key focal areas:

- a) Remittances, development (local economic growth) and poverty alleviation.
- b) Brain drain and development policy.
- c) Return migration in the life cycle of migrants.
- d) The Migration – Development Nexus in EU External Relations.
- e) EU Mobility partnerships: a comparative policy evaluation.

The Migration and Development Project in Burundi specifically addresses focal areas a, b and c. To achieve this, the research explores different types of migration and their impact on development outcomes through the use of survey tools. Key aspects of this research include developing an understanding of who migrants are; reviewing the determinants of both migration and remittances; identifying those who are returning to the country and how their skills distribution may have different developmental impacts and so forth.

In order to collect data useful for investigating these key issues, the survey used included a number of different modules that addressed these themes. The survey modules address key thematic areas such as migration, remittances and return while simultaneously gathering key contextual data on, for example, education, shocks and health. This allows for critical reflection on the relationships between different aspects of migration and development, where development is also largely viewed in terms of human development. For a detailed discussion of definitions and modules used in the survey please see Chapter 5 of this report.

The IS Academy Survey in Burundi

The fieldwork in Burundi, consisting of a nationally representative household survey, an urban household survey, a community survey, and in-depth interviews, took place between January and March 2011. The project was executed by Development through Expert Consultancy (DevEC), a research company located in Bujumbura, Burundi, in close cooperation with Maastricht Graduate School of Governance.

In total, 2310 interviews were conducted in Burundi. The national household survey took place in all provinces of Burundi and consisted of 1500 household interviews. The urban household survey was conducted in Bujumbura and covered 810 households in total. The community interviews were done in each community where we did at least one household interviews, which led to a total of 154 community interviews. In-depth interviews were conducted with government bodies, Non-Governmental Organizations (NGOs), financial institutions such as banks and Money Transfer Operators (MTOs), and other organizations in Burundi on the topics of migration, remittances and development. These in-depth interviews were used to construct policy briefs on these topics and will not be discussed in detail in this document.¹

This report describes the methodology that was applied for the fieldwork in Burundi and discusses the sampling procedures. First, a brief country context is presented in Chapter 2, sketching the main historic and current migration flows and the development challenges that Burundi currently faces. In Chapter 3 the sampling procedures are discussed as well as the intra-household selection of respondents. Chapter 4 gives an overview of the preparations for the fieldwork, such as the training of the enumerators, the pilot survey and practical issues such as asking permission from local authorities. Chapter 5, finally, gives an overview of the measurement tools that were used in this study.

¹ See Fransen & Siegel (2010) and Fransen & Andersson (2011).

2. Country Context

Burundi is a small country in the Central African Great Lakes Region. Its neighbouring countries are Rwanda to the North, Tanzania to the Southeast, and the Democratic Republic of the Congo to the West. The country has been plagued by waves of civil conflict since it gained independence from Belgium in 1962. Burundi's first democratically elected government was installed in 2005. Only recently has the country experienced a period of stability and peace. Violent conflicts in Burundi and surrounding countries resulted in large migration flows. These flows mainly consisted of internally displaced persons (IDPs) seeking a safe haven in other parts of Burundi and refugees fleeing towards neighbouring countries such as Tanzania, Rwanda, and the Democratic Republic of the Congo. At the same time, Burundi served as a destination country for refugees from other countries as conflict continued across the whole region (Fransen & Siegel, 2010). A smaller proportion of Burundian refugees fled to western countries such as Belgium, the Netherlands, the United States, and Canada where they established an active Burundian diaspora network (Fransen & Ong'ayo, 2010; Turner, 2008a; 2008b).

Figure 1: Burundi Map



2.1 Geography and population

Burundi has 17 Provinces, 117 communes, 2,638 collines, and 8103 sous-collines, which is the smallest administrative unit in the country (see Table 1). In 2008, Burundi had a population of a little more than 7 million people. The average household size is around 6 people per household. With an area of 27.9 thousand square kilometres Burundi is densely populated. Table 1 presents the population statistics per province.

Table 1: Population by Province

Province	Population*	Percentage of total population	Sous-collines	Households
Cankuzo	205924	2.79	234	42324
Mwaro	262067	3.54	284	54345
Muramvya	280339	3.79	307	57627
Bubanza	291229	3.94	321	62778
Rutana	298866	4.04	342	61090
Ruyigi	356291	4.82	404	76500
Makamba	386799	5.23	417	74677
Karuzi	402933	5.45	441	85626
Cibitoke	409009	5.53	449	82718
Bujumbura Mairie	472095	6.39	460	89631
Bujumbura Rurale	505964	6.84	557	102788
Bururi	517616	7.00	570	97470
Muyinga	562552	7.61	613	126508
Kayanza	565251	7.65	644	123056
Kirundo	589690	7.98	639	138750
Ngozi	617095	8.35	694	130604
Gitega	669242	9.05	727	141670
Total	7392962	100.00	8103	1548162

Note. * Population in 2008. *Source:* DevEc (2008).

2.2 Migration statistics²

Burundi is still both an immigration and emigration country. Refugees residing in Burundi are mostly from the Democratic Republic of the Congo and Rwanda. Since the security situation has improved in Burundi, the number of IDPs has decreased slowly from over 280,000 in 2003 (ICG, 2003) to 100,000 as of October 2010 (UNHCR, 2010). In addition, many migrants returned from neighbouring countries. Return migration is a complex and sensitive issue in Burundi due to already-existing problems of overpopulation and land scarcity (Fransen & Ong'ayo, 2010). Most refugees originating from Burundi live in Tanzania, the Democratic Republic of the Congo, Uganda, and Rwanda. Tanzania currently hosts the most Burundian refugees, most of whom are located in the 'Old Settlements' created by the Tanzanian government after the 1972 inflow of refugees from Burundi.

Table 2: Refugee statistics

Residing in Burundi	
Refugees	24,967
Asylum Seekers	6,338
Returned Refugees	32,362
Internally Displaced Persons (IDPS)	100,000
Total population of concern	163,667
Originating from Burundi	
Refugees	94,239
Asylum Seekers	4,864
Returned Refugees	32,362
Internally Displaced Persons (IDPS)	100,000
Total population of concern	231,465

Source: UNHCR, 2010

² For an overview of current and historic migration processes in Burundi see Fransen & Siegel (2010).

The border provinces with Tanzania and Rwanda were mostly affected by either in- or out-migration flows in the past years. In the middle provinces and the provinces bordering Lake Tanganyika migration prevalence has been lower. The capital, Bujumbura, however, hosts a high number of return migrants. Most IDPs currently live in peace villages in the northern and central provinces.

2.3 Migration and development

One of the main challenges Burundi faces today is poverty. Burundi has one of the lowest per capita incomes in the world with only US \$110 in 2007 (World Bank, 2009a) and the Human Development Index ranked Burundi as number 166 out of 169 countries in 2010 (UNDP, 2010). Rural households are especially affected by poverty (World Bank, 2009a), as are young people. In Burundi 86 per cent of the population aged between 15 and 24 lived below the US \$2 a day poverty line in 2009. This is a high proportion, even within a region with an average youth poverty rate of 72 per cent (World Bank, 2009b). Burundi's weak economic performance mostly reflects the country's history of civil war. Between 1993 and 2007, per capita income decreased by almost 40 per cent (World Bank, 2009a). As a result the percentage of people living below the one dollar a day poverty line rose from 35 per cent to 67 per cent between 1993 and 2006 (World Bank, 2009a).

As in many developing countries, migration and development processes are closely linked in Burundi (see Fransen & Onga'yo, 2010 for a full overview). The large influx of return migrants puts a large pressure on Burundi's resources; resources which are already scarce. Burundi has also witnessed an increasing level of out-migration by the highly skilled, often referred to as 'brain drain'. Increasing remittances flows have a large development potential for Burundi, but these flows are not yet utilized to their full extent (see Fransen & Andersson, 2011).

3. Sampling of Households & Intra-Household Selection

The fieldwork in Burundi consisted of two stages: 1) a nationally representative household survey that took place in all provinces of Burundi and 2) an urban household survey that took place only in Burundi's capital, Bujumbura. Both the national and urban household surveys were complemented with a community survey. The national household survey took place first and had a sample size of 1500 households and 100 community interviews (see Table 3). The urban household survey was conducted after the national household survey and consisted of 810 household interviews and 54 community interviews. In the following sections the sampling strategies for both the national and urban household survey are described. First, the sampling procedure for the communities is presented, after which the selection of households within the communities and selection of main respondents within households is described.

Table 3: Number of surveys conducted in Burundi

Survey	Household	Community
National survey	1500	100
Urban survey (Bujumbura)	810	54
Total	2310	154

3.1 Sampling of communities for the national and urban household survey

National household survey

The primary sampling unit (PSU) in Burundi was the *sous-colline*, which is the smallest administrative unit in the country. As there were no national lists available on the *sous-collines* in Burundi, the first steps in selecting the communities focused on the *colline*, the second smallest administrative unit in the country. Each *colline* consists of between two and 10 *sous-collines*. There are approximately 8000 *sous-collines* in Burundi that each have an average of 180 households. See Appendix 1 for a map showing the provinces in Burundi.

The sampling of the communities for the national household survey consisted of three steps: 1) the distribution of *collines* over the provinces in Burundi, 2) the within-province selection of *collines*, and 3) the random selection of *sous-collines*. One hundred *collines* were selected in total for the national household survey. Within each *colline*, one *sous-colline* was selected. Within each *sous-colline* 15 interviews were conducted. The different steps in selecting the communities are described below.

Step 1: Distribution of *collines* over provinces

As the sample size for the national household survey was fixed at 1500 households and 15 interviews would be conducted per community, the number of *collines* to be selected was 100. These 100 *collines* were distributed over the 17 provinces in Burundi according to the demographic weight of these provinces. This process was based on Burundi census data from 2008, which was provided by our local research partner. As a result of this first step all provinces in Burundi were included in the research and the number of questionnaires conducted in each province was based on the share of the total population living in each province. This step was taken to take into account the diversity between the Burundian provinces in terms of current and historic migration patterns (see Chapter 2). Table 4 presents the number of household interviews and community interviews conducted per province in Burundi.

Table 4: Interviews conducted per province

Province	No. of household interviews conducted per province	% of household interviews conducted per province	No. of community interviews conducted per province	% of community interviews conducted per province
Bubanza	60	4.00	4	4.00
Bujumbura Rural	105	7.00	7	7.00
Bururi	105	7.00	7	7.00
Cankuzo	45	3.00	3	3.00
Cibitoke	90	6.00	6	6.00
Gitega	121	8.07	8	8.00
Karuzi	75	5.00	5	5.00
Kayanza	119	7.93	8	8.00
Kirundo	120	8.00	8	8.00
Makamba	75	5.00	5	5.00
Muramvya	60	4.00	4	4.00
Muyinga	120	8.00	8	8.00
Mwaro	60	4.00	4	4.00
Ngozi	120	8.00	8	8.00
Rutana	60	4.00	4	4.00
Ruyigi	75	5.00	5	5.00
Bujumbura Mairie	90	6.00	6	6.00
Total	1500	100.00	100	100.00

Step 2: Within-province selection of collines

The *collines* within the provinces were sampled proportionally to population size. This means that larger *collines* had a higher chance of being selected. This step was taken to avoid logistical problems, since many small *collines* and *sous-collines* are difficult to reach. Most *collines* however were located far away as well, since over 90 per cent of the Burundian population lives in rural areas and the roads are of equally bad condition throughout the country. We therefore do not expect a bias to arise from this selection process.

Step 3: Random selection of sous-collines

Within each *colline* a *sous-colline* was randomly chosen to conduct the interviews in. This was done by the enumerators at the fieldwork site. The enumerators would normally write all the names of the *sous-collines*, as provided by local authorities (usually the *chef de colline*) upon arrival, on a separate piece of paper and draw one name randomly.

Urban household survey

The urban household survey took place in Bujumbura. For the urban household survey a similar sampling strategy was applied as for the national household survey. The PSUs in Bujumbura were the neighbourhoods (*quartiers*), which were sampled proportionally to population size. In each neighbourhood that was sampled, one block, consisting of two to four streets, was randomly chosen to conduct the interviews in. In total, 810 surveys were conducted in 54 blocks. Fifteen interviews were thus conducted per block.

3.2 Selection of households for the household survey

The selection of households was the same for both the national and urban household survey. Within each *sous-colline* (in the urban case: *quartier*) 15 households were randomly selected to be interviewed. This was done based on lists of households provided by local community leaders (or neighbourhood representatives in case of the urban survey) upon arrival at the site. Every local community leader of each *sous-colline* or neighbourhood in Burundi is expected to keep a list of households so most of the times these lists were available. In the few cases when there was no list available, the supervisor would sit down with the community leader and make a list of households. In only a few cases a random walk method was applied to select households. This method was however only applied for the urban household survey, especially in new neighbourhoods where no lists were available, or where the neighbourhood representative was not present at the time of the interviews.

If a list of households was available, which was the case in most *sous-collines* or neighbourhoods, the households were selected from the list, based on the following procedure. Each supervisor carried a laminated paper with a table consisting of the number of households that could be living in a *sous-colline*, and, based on this number of households, 20 randomly pre-selected households (see Table 6). These 20 randomly selected households on the paper consisted of the 15 households to be interviewed and five ‘reserve’ households that would be interviewed in case one or more of the randomly pre-selected household was not available. The laminated paper with the pre-selected households is presented below.

An example. When a team, consisting of 5 enumerators and 1 supervisor, arrived in a *sous-colline*, they first asked for the list of all households living in the *sous-colline* from the local community leader. If the list contained, for example, 200 households, the supervisor would go to the column ‘N = 200’ and ask for permission to interview household number 33, 146, 154, etcetera, on the list of households provided by the local leader.³ They would then receive the contact details of those households or, which happened often, the community leader would walk with the enumerators to introduce them to the selected households.

3.3 Within-household selection of respondents

For the household survey we interviewed main respondents. A main respondent was older than 18 years old and the most knowledgeable person on household financial and social affairs. Preferably, the main respondent was the head of the household or a senior household member such as a mother/father or grandmother/grandfather. The final module of the household questionnaire contained the return migrant module. This module contained questions for possible return migrants in the households. If there was one return migrant in the household the return migrant module was conducted with this person. If there were multiple return migrants in the household, one return migrant was randomly selected. In case all household members were return migrants, when for example the whole household migrated together, the household respondent answered the questions in the return migration module. Table 5 below presents the definitions for the main respondents for the household survey. The enumerator would always carry a manual that contained the definitions of the respondents.

³ In case the total number of households was not exactly 100, 150, or 200, etcetera, the supervisor would round up the number to the nearest higher number. So if the total number of households in a *sous-colline* was, for example, 151, or 199, the supervisor would use column ‘N = 200’.

Table 5: Definitions of main respondents for the household survey

SURVEY	UNITY OF ANALYSIS	WHOM TO INTERVIEW	SELECTION OF INTERVIEWEE
Household survey	Household	Household representative	<ul style="list-style-type: none"> - preferably the household head - older than 18 years - the most knowledgeable person on household financial and social affairs
Return migrant module in the household survey	Return migrant	One return migrant in the household	- A person that has lived in another country for a consecutive period of 3 months or longer that has returned to Burundi to live there permanently

Table 6: Sampling sheet with pre-selected household

TABLEAU DES NUMEROS ALEATOIRES										
N: Nombre des ménages dans la sous-colline										
ID du ménage	Status		N=100	N=150	N=200	N=250	N=300	N=350	N=400	N=450
1	Enqueter		26	20	33	85	85	327	320	308
2	Enqueter		40	97	146	124	38	61	262	340
3	Enqueter		99	55	154	74	28	158	140	364
4	Enqueter		50	102	79	226	57	32	1	292
5	Enqueter		22	112	103	203	191	150	18	58
6	Enqueter		53	121	177	206	231	55	177	190
7	Enqueter		60	96	8	198	273	83	397	125
8	Enqueter		49	18	168	222	147	257	31	438
9	Enqueter		98	102	89	150	222	177	138	281
10	Enqueter		53	41	71	116	218	160	111	302

11	Enqueter		12	145	73	151	10	119	397	29
12	Enqueter		82	133	67	46	31	242	82	276
13	Enqueter		74	100	86	175	48	222	278	316
14	Enqueter		51	8	28	105	300	25	279	436
15	Enqueter		91	131	54	183	144	173	88	406
16	Reserve		73	104	82	201	232	338	154	257
17	Reserve		55	145	146	214	189	27	251	374
18	Reserve		82	24	49	174	97	1	67	143
19	Reserve		1	125	46	43	293	80	218	144
20	Reserve		65	124	108	183	6	101	58	380

3.4 Non-response

As the response rate in the pilot was 100 per cent and our local partner, who is experienced in doing surveys in Burundi, assured us that non-response would not be a problem in Burundi, the enumerators did not keep track of response rates during the fieldwork. Frequent interactions with the enumerators during the national household survey showed that non-response was indeed not a problem in Burundi. According to the enumerators, people were often happy to have visitors and to share their stories. For the urban household survey in Bujumbura, however, there were some cases of non-response recorded, especially in wealthier neighbourhoods.

3.5 The community survey

The community survey took place simultaneously to the household survey. In most cases the team supervisor would conduct the community interviews while the team members conducted the household interviews. A community representative was the respondent for the community questionnaire. This community representative was a senior person in the community and preferably the community leader (see Table 7). There were no cases of non-response recorded for the community survey.

Table 7: Definition of main respondent for the community survey

SURVEY	UNITY OF ANALYSIS	WHOM TO INTERVIEW	SELECTION OF INTERVIEWEE
Community survey	Community	Community representative	<ul style="list-style-type: none">- senior person in the community- preferably the community leader- knowledgeable on history and current state of the community

4. Practicalities

This chapter describes the practical side of the IS Academy survey implementation in Burundi.

4.1 Questionnaire translation

In recognition of the importance of translation this study adopted a three-stage approach to translation: transcription, transcription review and an adjudication body (Harkness, 2003). First, individuals who were familiar with both the language and the field of migration studies transcribed the questionnaire. In Burundi this was completed by a team of Bachelor and Masters students familiar with migration studies. The questionnaire was then reviewed by qualified individuals (Doctoral students) that had an understanding of both migration studies and the language. The final step was to have the questionnaire team in each country act as an adjudicating body – who made the final decisions regarding which translation to adopt - for the final questionnaire. The questionnaire was translated into French, which is one of the official languages in Burundi. However, most people still speak Kirundi, especially in the rural areas. Due to a lack of resources the questionnaire was not translated into Kirundi. In case a respondent did not speak French, the questionnaire questions were translated on the spot by the interviewer. The language in which the questionnaire was conducted was recorded so that comparative analyses can be done to reveal any bias that may have occurred.

4.2 Fieldwork preparation in Burundi

Local partner & IS Academy team

As stated in the introduction our local research partner in Burundi was DevEC (Development through Expert Consultancy). The selection of enumerators, training of enumerators, fieldwork supervision, logistics, sampling, and data management was all done by DevEC. Most of the enumerators had worked for DevEC before and were selected for the project based on their previous experience and performance, and their experience using Personal Digital Assistants (PDAs). One researcher from the Maastricht Graduate School of Governance was permanently present during the fieldwork in Burundi to work with DevEC. This researcher was actively involved in the training, pilot and supervision of the enumerators and in every aspect of the data collection process.

Enumerators

The enumerator team consisted of 15 enumerators and three supervisors. The enumerators were split into three teams of five enumerators, each with one supervisor,

when going into the field. All enumerators had previous experience in conducting interviews and most of the enumerators had also worked with the PDAs before. The 15 enumerators were responsible for the household questionnaires, while the supervisors requested permission from local authorities before the data collection, conducted the community questionnaires, and measured the height and weight of the children below the age of five and their biological mothers after each household interview. Each team went to a different location (*sous-colline*) every day to carry out the interviews. Each enumerator did three surveys per day, which means that a total of 45 household questionnaires and three community questionnaires were conducted each day.

Training of the enumerators

The training for the 15 enumerators and three team supervisors for the household questionnaire took place on four days between 17 January and 20 January 2011. The additional training for the three supervisors on the community questionnaire was done on 22 January 2011. This training only took one day, because the supervisors were also experienced enumerators and had also participated in the household questionnaire training. The community questionnaire also contained questions which were relatively simpler than the household questionnaire. Since we worked with experienced enumerators, the four days used for the household questionnaire training and the one day we used for the community questionnaire were sufficient. Focus was mostly on the structure of the questionnaire, its content, and on explaining why certain questions were important. We also spent considerable time explaining the relevance of the survey and how the data would be used. All trainings for the enumerators were held at l'Université s'Agesse d'Afrique, located in Bujumbura, Burundi.

During the trainings all enumerators and supervisors received a detailed training manual, consisting of an explanation of the project and its goals, an introduction to the questionnaires and a guide on how to approach households. The training manual also contained a trouble shooting section, in which potential difficult situations were discussed, and a safety protocol. These issues are discussed in Chapter 5 of this fieldwork report.

Pilot of the survey

The pilot of the household survey in Burundi was done on one weekday in January 2011. The pilot took place in Gatumba, a semi-urban area just outside Bujumbura, the capital of Burundi. This area is characterized by high out-migration rates during the conflict in Burundi due to its proximity to the border of the Democratic Republic of the Congo (DRC). Currently, the area has many return migrants; people that returned to Burundi after the security situation in the country improved after 2005.

In total the enumerators spent six hours in the field. The pilot started at 10:00 a.m. and ended at 16:00 p.m. Permission to conduct the survey was requested from the local administration representative before starting the pilot. In total, 40 interviews were conducted with households living in Gatumba. The households were selected randomly in the area by applying a random walk method. The 15 enumerators completed a total of 37 interviews, and each supervisor also conducted one interview each. The target of three household interviews per enumerator per day was not met during the pilot. This was mostly due to technical problems with the PDAs, which were resolved afterwards. Apart from these technical problems and some minor issues with regard to the streaming of the questionnaire, no major problems were reported during the pilot. The response rate during the pilot was 100 per cent.

Permission from local authorities

Before starting the fieldwork permission was requested from the Burundian Ministry of Internal Affairs by our local partner DevEC. After we received this permission from the Burundian Ministry of Internal Affairs by means of an official letter we contacted local authorities at the colline-level and the sous-colline level each day before going into the field. As we followed the official procedures of requesting permission for doing research in Burundi there were no problems reported.

4.3 During the data collection: Logistics and supervision

Data collection mode

The data collection was done electronically; both the household questionnaire and the community questionnaire were conducted with PDAs. This enhanced the quality of the data, facilitated data management and eliminated the need for data entry. The program used in the PDAs was CSPRO. All enumerators had their 'own' PDA, which was linked to them by means of an enumerator number. Each team supervisor also had a PDA upon which the community questionnaire was completed. The PDA of the team supervisor also functioned as the 'reserve' PDA in case of a problem with one of the other PDAs. This way each team would always have a reserve PDA on the fieldwork site. This proved to be essential in some cases.

The PDAs were charged each night and usually the battery lasted for a whole day. In case of emergency the cars that transported the enumerator teams to the fieldwork sites were also equipped to charge the PDAs by means of special plugs. Most of the fieldwork sites were remote areas without access to electricity so, without the cars, the enumerators would not be able to charge the PDAs. In most cases it was not necessary to charge the PDAs during the day.

Logistics

As described earlier the enumerators were split into three teams of five people, that each worked with a team supervisor. During the fieldwork for the national survey, the three interviewer teams usually travelled for longer periods at a time, moving from one fieldwork site to another. The province capitals were habitually used as a base where the enumerators would stay in hotels during the nights and from where day trips were made to the selected sites. For the national survey the enumerators were transported to the fieldwork sites by means of four-by-four cars. Some areas were difficult to reach due to bad roads (especially on rainy days). Each enumerator team (including the team supervisor) had one car with a driver that took them to the fieldwork site in the morning and took them back to the hotel in the evening. For the urban survey the enumerators could go home after each day. In the city the enumerators were transported to the selected neighbourhoods with a bus.

Supervision and field visits

The data collection in Burundi was supervised and checked robustly. Apart from the team supervisors of each team there was one overall supervisor from DevEC constantly present to supervise the data collection process. In addition, an IS Academy researcher was in Burundi during the total period of the fieldwork and was present at most of the interview sites. Field visits by the supervisor from DevEC and/or the IS Academy researcher were done every day, which meant that the supervisors travelled with the teams to the rural areas and stayed with them for the duration of the fieldwork. The teams, who usually worked at different locations during the day, were visited every day. Debriefings were done each evening.

There were several reasons for the high frequency of field visits. First, the security situation in Burundi was relatively stable at the time of the data collection, but differed significantly across locations. By checking all teams every day, the safety of the enumerators was monitored. Second, the infrastructure in Burundi, both in terms of roads and telecommunication, is relatively underdeveloped. The enumerator teams would often work in locations that were difficult to reach and lacked phone reception. Travelling with the teams simply made the supervision process more efficient. Third, the data was taken from the PDAs every day and stored on a laptop. This ensured that a backup of the data was made every day and possible problems with the PDAs would lead to a maximum of one day of missing data. Fourth, the DevEC supervisor would, after visiting the enumerator teams in the field, travel to the community that was on the schedule for the next day to notify local authorities. Visiting local authorities would sometimes take a lot of time so the supervisor would visit beforehand to avoid delays the following morning. It was therefore necessary that a DevEC supervisor was present each day.

4.4 Challenges of data collection in Burundi

Safety and security

As already mentioned, the security situation in Burundi at the time of the survey required special attention. Even though there was no direct threat to the survey and the people involved, the security situation in Burundi was fragile and restricted certain parts of the fieldwork process. It was, for example, not possible to travel before 9 in the morning and after 6 in the evening. This highly limited the travelling time of the enumerator teams. There were also some fieldwork sites where it was impossible for the IS Academy researcher to visit, due to potential safety risks. All enumerators were instructed on, and carried with them, a safety protocol that would guide them in case potentially dangerous situations would arise. In the end the enumerator teams reported no safety issues.

Infrastructure

Even though Burundi is a relatively small country, travelling between fieldwork sites was often not an easy task. The roads were sometimes in a bad condition and trips of a minimum of four hours to reach a fieldwork site were not an exception. Combined with the security situation that restricted the working hours of the enumerators to nine hours (between nine in the morning and six in the evening), the time that the enumerators had to complete the questionnaires was sometimes short. This is one of the reasons that the enumerators only had to complete three questionnaires per day. As was also described earlier, phone reception was often not available at fieldwork sites in rural areas. It was therefore sometimes difficult for the supervisors to locate the teams for the supervision visits during the day. The drivers had no detailed map of the roads in the rural areas and often had to rely on directions from locals.

5. The Questionnaires

The main measurement tools for this study in Burundi were a household survey and a community survey. The household survey gave us information about the whole household that was interviewed. The community survey was conducted with a community representative in each community in which at least one household survey was done and was used to map the community in which the households live. Both surveys are split up in an introductory part and the survey modules. The household survey and community survey are discussed in detail below. Key definitions used within the surveys are listed in paragraph 5.1.

5.1 Key Definitions

Key definitions used within the surveys are listed in the table below:

Key Definitions

Children: All household members under the age of 18.

Community: A social group of any size whose members reside in a specific locality, share government, and often have a common cultural and historical heritage. In the case of this research we will focus on the smallest administrative unit in each country.

Elderly: All household members 65 and over.

Household: All individuals who are living together and have communal arrangements concerning subsistence and other necessities of life and inclusive of all individuals presently residing elsewhere (in the country or abroad) whose principle commitments and obligations are to this household. Households can thus contain people that currently live abroad. Households can also consist of one person.

Household Members: Includes all members of the household regardless of age, country of birth, or maternal/ paternal ties and current location.

Internal migration: A move between cities or villages within the same country for a stay of at least three months.

International migration: A move across international borders for a stay of at least three months.

Main Respondent: A person that is a member of the household, at least 18 years old, and the most knowledgeable person on financial and social matters of the household. Preferably the main respondent is the head of the household. If the head of the household is not at home at the time of the interview, the spouse of the head of the household would be a good alternative.

Migrant: A person who currently lives in a country other than the one he/she was born in and has lived there for at least three months.

Monetary Remittances: Money transfers.

Return Migrants: An individual who has returned to the country of origin either voluntary or forced to live fulltime after a minimum of three consecutive months living in another country.

Social Remittances: The ideas, knowledge, behaviours, identities, and social capital that flow from receiving to sending country communities.

To 'live' in a country: To reside in a country for a *continuous period* of three months or more.

5.2 The household questionnaire in detail

The household questionnaire refers, as its name implies, to all members of each household interviewed. This means that we did not solely focus on individuals in Burundi, but on the whole household in which individuals live. The household questionnaire was conducted with a main respondent, who was preferably a senior member of the household who was most knowledgeable about the economic and social situation of the household and its members.

The questionnaire contained some questions that were to be answered for all household members, and some questions that were answered only by, and for, the main respondent. The final module of the household questionnaire focused specifically on possible return migrants in the household. The household questionnaire is divided into different modules, each of which has a different subject:

IS Interviewer sheet

The Interviewer sheet was filled in by the enumerator. This sheet contains questions on when the interview was conducted, where the household is located, and some questions on the characteristics of the household that can be answered by observing the household.

A Household roster

This module gives an overview of who lives in the household and the characteristics of these household members such as their age, their level of education and whether or not they ever migrated.

B Children

The questions in this module deal with the household's younger members, under the age of 18. The questions are about schooling and work or tasks that the children do, either in the household or outside the household.

C Migration

The migration module asks about the migration experiences of the household members and about future migration plans.

D Remittances

This module asks for information on money and goods that were sent *to* the household in the past 12 months and money and goods that were sent *from* the household to other households living abroad.

E Household assets

In this module we are interested in the assets a household owns. The questions focus both on the present time and on the assets a household owned five years ago.

F Expenditures

This module is about the household expenditures on, for example, food, education, healthcare, etc.

G Income

In this module we asked for the income of the household in the past year. What were the main sources of income, and how much did each source of income contribute to the total household income in the past year?

H Shocks

For this module we asked the households whether or not they had experienced any shocks that significantly impacted their economic status and whether or not they experienced certain types of conflict. Shocks include weather-related events such as drought or excessive rain, but also losses of assets due to violence, or the death or serious illness of a household member.

I Borrowing and saving

The borrowing and saving module asks whether or not the household currently has any debts or savings.

J Usage and access to facilities

This module is about the access the household has to certain facilities, such as healthcare and education.

K Subjective wealth

After all the modules that deal with the economic position of the household, this module contains subjective questions on wealth.

L Formal and informal networks

This module asks about the formal and informal networks the household currently has, both in the country itself and abroad.

M Opinions

This module contains questions on certain personal opinions of the main respondent.

N Safety and security

This module is about the feelings of safety the main respondent experiences.

O Return migration module

As described earlier, this module focused specifically on possible return migrants in the household. It asks about their experiences during migration and upon return.

5.3 Anthropometric measurements

As an indicator for health and the nutritional status of the households, the height and weight of one randomly chosen child under the age of five and their biological mothers were measured. This was done by means of measurement equipment (measuring boards and scales) that were borrowed from UNICEF Burundi.

5.4 The community questionnaire in detail

The community questionnaire was designed to create an overview of the history of the community, its culture and the current situation of the community. The community questionnaire consists of the following modules:

IS Interviewer sheet

The Interviewer sheet was filled in the enumerator. This sheet contains questions on when the interview was done, where the community was located, and some questions on the characteristics of the respondent of the community survey.

A Basic characteristics

This section contained questions on the community history, language, culture and current population.

B Community issues

The community issues section asks about the main problems the community is currently affected by.

C Infrastructure

This section deals with the availability of infrastructure in the community, such as roads and transportation, water and sanitation, housing and land, and different facilities such as health care centres and schools.

D Economic situation

The economic situation section contains questions principal economic activities for men and women, questions about working age (child labour) and employment, subjective well-being, and inequality.

E Shocks

Section E asks about both economic and conflict shocks that the community had experienced in the past five years.

F Safety and security

Section F deals with the current safety and security situation in the community.

G Social ties

The social ties section asks about levels of trust, participation in community projects, and the availability of community associations.

H Children

This section focuses specifically on the children in the community and mainly deals with the availability and quality of schooling in the community.

I Health

Section I asks about the main health problems that men, women, and children experience in the community, and the availability and quality of healthcare.

J Migration

The migration section in the survey contains questions on both historic and current migration patterns, such as return migration, forced migration, labour migration, etcetera. It also contains a section on how the different migration dynamics are experienced by the community members.

K Children left behind

This section focus specifically on children that are left behind by parents that migrate. The section contains questions on coping mechanisms and perceptions on children left behind.

L Remittances

This section deals with the international transfers of money and goods that are present in the community.

M Migrants' investments and charitable activities

Section M explores the activities of diaspora members in the community through investments or charitable activities, such as working in or contributing to NGOs.

5.5 Types of questions

The questionnaires contain different types of questions. Below the different types of questions are introduced and explained.

Closed versus open questions

Most questions in the questionnaire are closed questions. These present the respondent with a set of possible answers to choose from. See the example below. Question A.A.5 needs to be answered for all household members. So, you indicate a '1' if the person is single, and '2' if the person is married. Only the main respondent answers question M.3.

ID	A.A.5
	What is this person's marital status?
	1. Single 2. Married 3. Divorced 4. Widowed
1.	
2.	
3.	
4.	
5.	

	M.3
Please respond to the following statements	
	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
1. Only men should make decisions about big spending	
2. Only women should take responsibility for the household	

A small number of questions in the questionnaire are open questions. These questions do not present the respondent with a set of possible answers to choose from. Instead, the respondent is asked to come up with her/his own answer or explanation. The enumerator filled in the answer given by the respondent in either English or French in the PDA.

Questions with ranking

Some questions asked the respondent to rank the answers in order of importance. Usually, the top three answers are ranked. (see question D.B.3 on the right). In box I (Good 1) the most important answer was noted, in box II (Good 2) the second most important answer was noted, etc. As you can see, the instructions for the question are indicated between brackets, below the question.

Questions with the option to specify

For some questions, there is an option to specify a response that is not listed yet, as you can see in the example here on the right (question C.A.10). In case the respondent gives an answer that is not already listed, '5' is recorded, which means 'Other'. The response the respondent gives is then recorded in either English or French.

Questions with "choose all that apply"

Sometimes you will find the instruction (choose/mark all that apply). In those cases it is likely that the answer contains more than one of the categories listed and *all* answers given by the respondent are listed.

The 77, 88, and 111 answer categories

As a general rule, 88 is the code for the answer "don't know". The code 77 applies when the respondent does not want to answer the question, for whatever reason. The answer category 111 is chosen when the question is not applicable to the respondent.

D.B.3		
What kind of goods did this household receive from this person in the past 12 months? (Rank top 3: 1, 2, 3)		
1. Food	6. Other electronics	
2. Clothing/shoes	7. Medication	
3. Mobile phone	8. Books/CDs/DVDs	
4. Television	9. Other (specify)	
5. Computer/laptop		
Good 1	Good 2	Good 3
C.A.10		
In order to migrate to a country, people commonly acquire documentation before leaving. Did this person acquire any of the following documents before migrating?		
1. Tourist visa 2. Work visa 3. Student/ study visa 4. Refugee status (UNHCR) 5. Other (specify)		

Appendix I: Administrative Units of Burundi



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Cartographic Section

Source: UN Office for the Coordination of Humanitarian Affairs. Published: June 2004.

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