

Rwanda Enterprise Informal Survey 2011 Data Set

1. Introduction

This document provides information on the World Bank's Informal Enterprise Survey (IFS) collected in Rwanda from June to July 2011.

- 1.1. The World Bank's Informal Enterprise Surveys (IFS) collect data on non-registered business activities in every region of the world. The IFS are implemented in parallel to the World Bank's Enterprise Surveys (ES), which interview formal, private, non-agricultural firms in countries around the world (www.enterprisesurveys.org).

The IFS use a standardized survey instrument designed to assess the business environment for non-registered businesses within a well-defined universe of activities, which have been identified using information from previous iterations of the studies. The IFS cover business environment topics including: general business characteristics, infrastructure, crime, sales & supplies, finance, labor, registration, business environment, and assets.

The IFS are conducted using a uniform sampling methodology in order to minimize measurement error and yield data that are comparable across the world's economies.

- 1.2. The Informal Surveys aim to accomplish the following objectives:
 - To provide information about the state of the private sector for informal businesses in client countries;
 - To generate information about the reasons of said informality;
 - To collect useful data for the research agenda on informality; and
 - To provide information on the level of activity in the informal sector of selected urban centers in each country

This report describes the survey population, the sampling methodology and the sample structure of the Rwanda informal survey; additionally, this report provides information that may be useful when using the data, including information on non-response rates and country-specific factors that may have affected survey implementation.

2. Survey Target Population

- 2.1. The primary sampling units of the IFS are non-registered business entities.¹ For consistency, “registration” is defined according to the established convention for the Enterprise Surveys in each country. In these surveys, the requirements for registration are defined on a country-by-country basis consulting information collected by Doing Business and information from the in-country contractors.
- 2.2. For Rwanda, informal firms were defined as those not registered with the Rwanda Development Board
- 2.3. At the beginning of each survey, a screening procedure is conducted in order to identify eligible interviewees. At this point, a full description of all the activities of the business owner or manager is taken; based on its principal activity, a business is then classified in the manufacturing or services stratum using a list of activities developed from previous iterations of the survey. Certain activities are excluded such as strictly illegal activities (e.g., prostitution or drug trafficking) as well as individual activities that are forms of selling labor like domestic servants or windshield washers.

3. Sampling Methodology

- 3.1. In each country, the IFS are conducted in selected urban centers, which are intended to coincide with the locations for the implementation of the main Enterprise Surveys. The overall number of interviews is pre-determined, and these interviews are distributed between the two urban centers, according to criteria such as the level of business activity and each urban center’s population, etc.
- 3.2. In Rwanda, the urban centers identified were Kigali and Butare. The target sample was 120 interviews for each urban center.
- 3.3. Sampling in the IFS is conducted within clearly delineated **sampling areas**, which are geographically determined divisions within each urban center. **Sampling areas** are defined at the beginning of fieldwork, and are delineated according to the concentration and geographical dispersion of informal business activity. After the sampling sizes are defined for each location every city is divided into several areas that may or may not correspond to the administrative districts.

¹ Within the economics literature the concept of the informal firm is defined in many different ways. At times, combinations of these definitions are used in academic and policy work. In order to avoid confusion and also facilitate the standardization of methodology and data comparability, the IFS equate informality with non-registration.

- 3.4. The number of **sampling areas**, and the geographical area they contain, is determined with the goal that each **sampling area** will yield four effective interviews.
- 3.5. In Rwanda, each **sampling area** was designed to contain a physical area, on average, of no less than the equivalent of eight city blocks. These **sampling areas** may or may not correspond to the administrative districts of the urban center.
- 3.6. In both Kigali and Butare, for a total of 240 interviews, 16 **sampling areas** were identified: 12 in Kigali (Kimisagara, Muhima, Gitega, Nyamirambo, Remera, Gatsata, Gisozi, Kimironko, Rusororo/Kabuga, Gikondo, Gatenga and Kabeza/Kanombe) and 4 in Butare Mukoni, Rwabuye, Rwabuyanga, Centre Ville de Butare). Each area was divided in several sectors. In total 66 sectors were created.
- 3.7. The placement of **sampling areas** in each city was determined, consulting local knowledge, using the criteria of the concentration of informal business activity and territorial dispersion.
- 3.8. In order to provide information on diverse aspects of the informal economy, the sample is designed to have equal proportions of services and manufacturing (50:50). These sectors are defined by responses provided by each informal business to a question on the business's main activity included in the screener portion of the questionnaire.

As a general rule, services must constitute an ongoing business enterprise and so exclude the sale of manual labor, as noted above. Manufacturing activity in the informal sector includes business activity requiring inputs and/or intermediate goods. Thus, for example, the processing of coffee, sugar, oil, dried fruit, or other processed foods is considered manufacturing, while the simple selling of these goods falls under services. If an informal business conducts a mixture of these activities, the business is considered under the manufacturing stratum.
- 3.9. Thus, each **sampling area** was designed with the goal of obtaining two interviews in services and two interviews in manufacturing.
- 3.10. In order to ensure a degree of geographical dispersion within each **sampling area**, two **starting points** were identified.
- 3.11. Due to the sampling procedures described above as well as the geographical dispersion of the targeted informal businesses, detailed maps using GPS coordinates and Google maps were produced.

- 3.11.1. Each **sampling area**, including its two **starting points**, were delineated using Google maps, with the GPS coordinates of the starting points being systematically recorded.
- 3.11.2. From each starting point a direction was identified that the interviewer had to follow
- 3.11.3. Four interviews (two services and two manufacturing firms) were completed from each starting point.
- 3.11.4. The interviewers were instructed to attempt an interview at every address passed until 4 completed interviews were achieved. Once the 4 interviews were completed in each sector (two services and two manufacturing firms), the interviewer moved to the next start point.
- 3.11.5. GPS coordinates of the interviewed business were recorded.

4. Sampling Structure

- 4.1. In **Rwanda**, 240 interviews were realized. The breakdown of the final sample was:

City	Interviews
Kigali	122
Butare	118
TOTAL	240

- 4.2. Moreover, the overall distribution by identified sectors is given in the following table (manufacturing sectors highlighted in green):

Activity	Kigali	Butare	TOTAL
Manufacturing of clothes or shoes	27	40	67
Manufacturing of baked food	13	10	23
Manufacturing of coffee, sugar, oil, dry fruits and other processed foods		3	3
Manufacturing of handcrafts		6	6
Manufacturing of furniture	8	13	21
Manufacturing of metal products	5	12	17
Manufacturing of household items		5	5
Other manufacturing (not included above)	11	11	22
Total Manufacturing	64	100	164
Selling food or Groceries (street food sellers, restaurants)	17	7	24
Selling of clothes or household items	1	2	3
Selling of business/computer/phone services	4	1	5
Selling of other goods	6	2	8
Cleaning and washing services	1		1
Hairdressers and barber shops	8	1	9
Repairing services	4		4
Other services (not included above)	17	5	22
Total Services	58	18	76
TOTAL	122	118	240

5. Database Structure

- 5.1. One version of the questionnaire was used for all interviews; variable *a0* indicates the module of the questionnaire. There are two levels of distinction in the informals data set: the data are distinguished by both the urban center/region (i.e. Kigali and Butare) and as a manufacturing or services business or activity, as detailed above.
- 5.2. All variables are named using, first, the letter of each section and, second, the number of the variable within the section, i.e. *a1* denotes section A, question 1. All variables are numeric with the exception of those variables with an “x” at the end of their names. The suffix “x” denotes that the variable is alpha-numeric.

- 5.3. There are 2 establishment/business identifiers, *idstd* and *idu*. The first is a global- unique identifier. The second is a country-unique identifier.
- 5.4. There are two levels of distinction: industry (manufacturing or services) and region. Variable *a3a* denotes the region² where the interviewed business is located. The variable *sect* indicates whether a business or activity was treated as manufacturer or service for the purposes of the interview. It is important to note that this variable is based upon variable *Sc2b*, which codes in detail the activity of the business or activity for the purposes of the questionnaire. *Sc2a* codes in detail the **main** product of the business or activity (in terms of sales value). As noted above, if an informal business or service has a main activity that is a service, yet has a manufacturing product, then the business is treated as a manufacturer. This treatment allows certain questions to be asked that only pertain to manufacturers (i.e., regarding inputs).
- 5.5. The screener information section (section Sc.) contains questions about the business activity and basic physical location of informal businesses; section B provides general information on the business and its ownership; section C discusses location and infrastructure; section I contains questions on crime; section D information on sales and supplies; section K is on finance; section L poses questions on labor; section R contains questions on registration; section M the business environment; and section N includes questions on business productivity.
- 5.6. All data are made available using Stata software. Due to restrictions of this software, variable labels are often shortened in the full data set. ***Please consult the full questionnaire for the complete text of questions and additional information.***

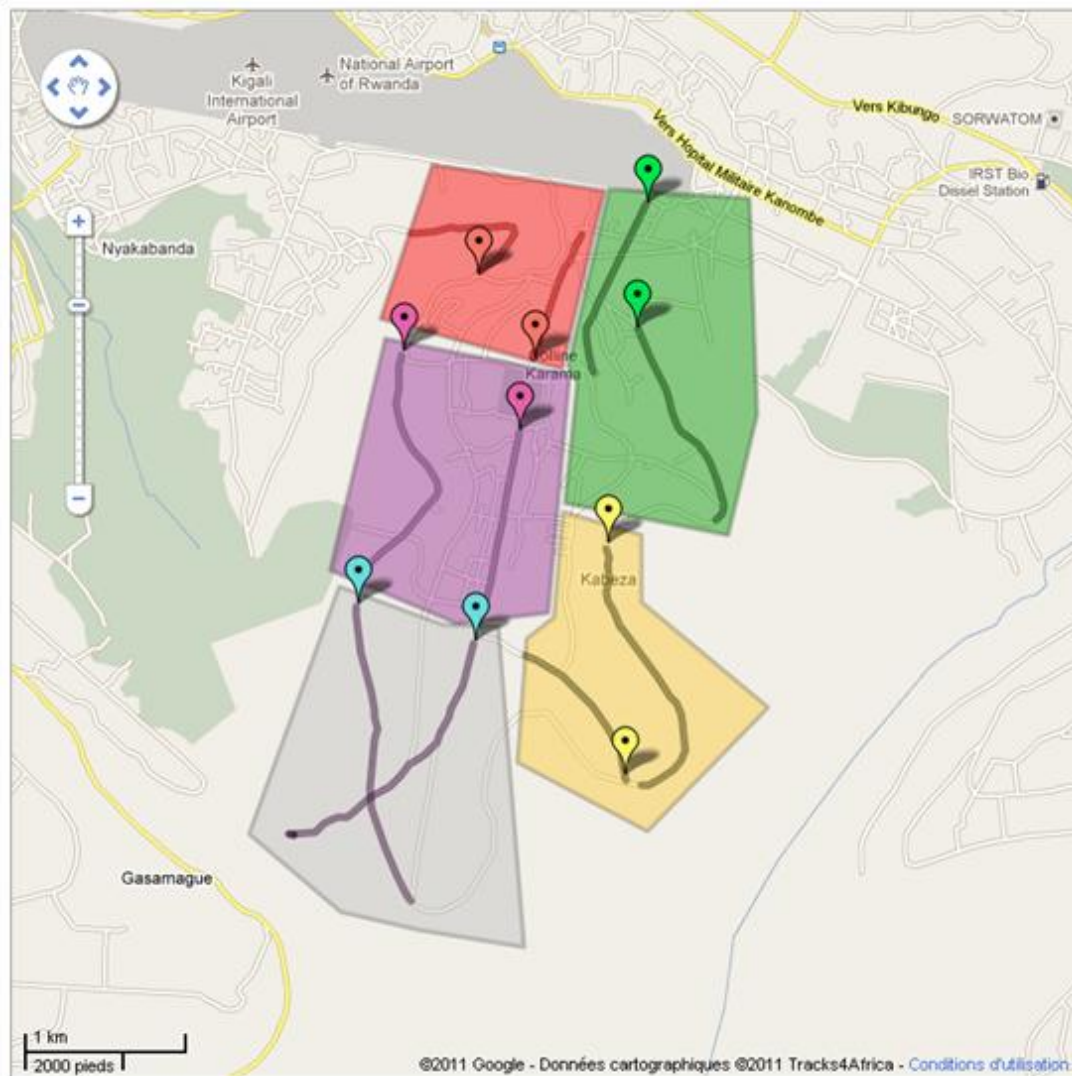
6. Country-specific implementation comments

- 6.1. The implementing contractor noted the following relevant issues in Rwanda during fieldwork:
 - 6.1.1. *Survey implementation.* The fieldwork faced difficulties. Some respondents refused to participate .
 - 6.1.2. *Non-Response.* Some respondents were concerned that the enumerators are working not for the Word Bank but for the Government.
 - 6.1.3. *Sales figures.* Most of the respondents were willing to provide an estimate of the total sales (87%) and labor force.

² Term “region” used in order to maintain comparability with the formal Enterprise Surveys.

Appendix: Maps

Kigali: Area Kabeza/Kanombe



Butare: Area Rwabuyanga

