

Botswana Informal Enterprise Survey 2010

1. Introduction

This document provides information on the World Bank's Informal Enterprise Survey (IFS) collected in Botswana from February – November 2010.

- 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 were developed in parallel to the World Bank's Enterprise Surveys (ES), which interview formal, private, non-agricultural firms in countries around the world (for more information, visit the ES website: 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 Botswana 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 Botswana, informal firms were defined as those not registered with the Central Statistics Office of Botswana (CSO).
- 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

The sample design aims to minimize input from the local agency and selection by the interviewers whilst recognizing practical issues. The rules in sample design are as follows:

- 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 four urban centers, according to criteria such as the level of business activity and each urban center’s population, etc.
- 3.2. In Botswana, Gaborone was identified as the urban center of interest. The sample was confined to the major cities covered and the survey was run in parallel with the enterprise surveys of the formal economy. The target number

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.

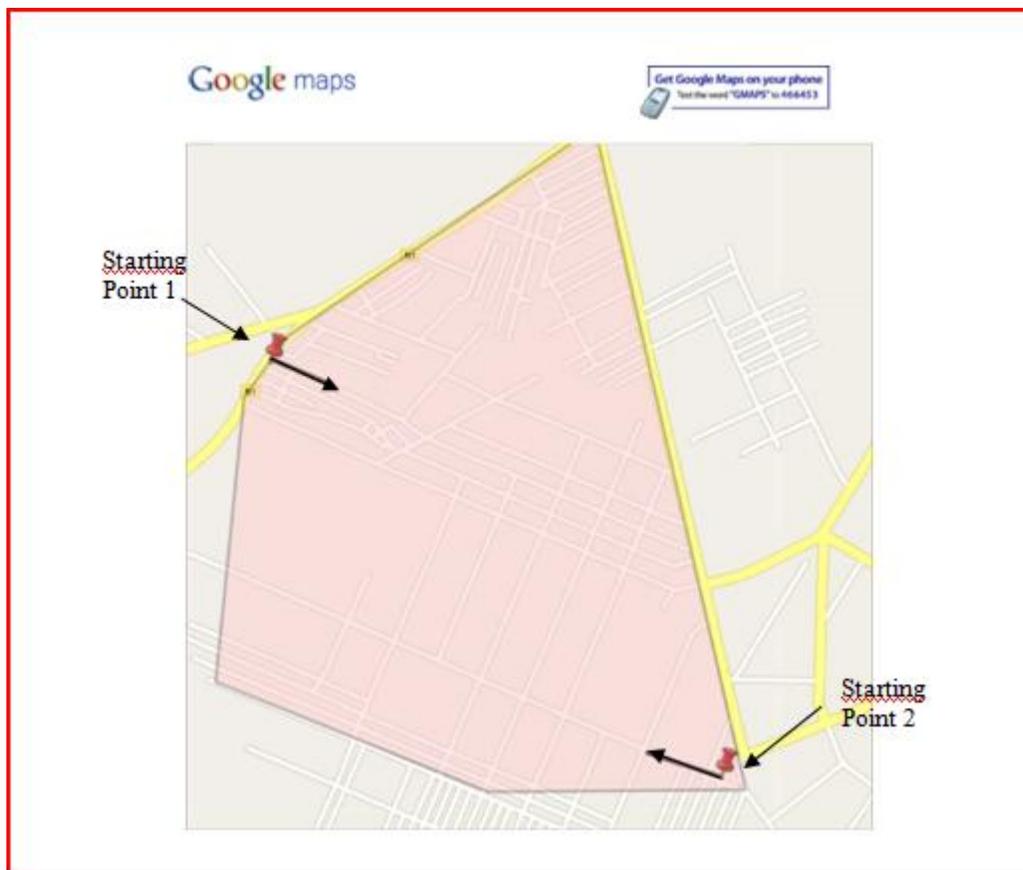
of interviews will reflect, as far as practical, the individuals' population distribution but with no more than 60% sample from a single city and no city with fewer than 20 interviews in total.

- 3.3. Sampling in the IFS is conducted within clearly delineated **sampling zones**, which are geographically determined divisions within each urban center. **Sampling zones** 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 zones that may or may not correspond to the administrative districts.
- 3.4. The zones are selected using local knowledge (information about the districts/parts of the city where most of the informal businesses are located). The sub-contractor hired to survey the particular country is expected to draw the zones and starting locations using Google maps following the instructions provided in this document. All maps are verified and approved by the WB task managers.
- 3.5. The number of zones depends on the sample size for this geographic location. For example, if in a particular city there are 40 planned informal interviews (20 manufacturing and 20 services) in the city should have 10 zones (4 interviews per zone including 2 manufacturing and 2 services firms).
- 3.6. In **Botswana**, using Google maps or local city maps, the target areas within each city were identified. With input from the local agency applying local knowledge, the starting points were defined. The number of zones was determined by the target sample size for each city divided by the cluster size (4 interviews). This is the only element of the sample selection where there is local influence.
- 3.7. In Gaborone, for a total of 99 interviews were completed in 16 **sampling zones**. As described above, the criteria used in choosing these sample sectors was a combination of territorial dispersion and the presence of informal businesses.
- 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. Each **sampling zone** 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 zone**, two **starting points** were identified.
- 3.11. Each **starting point** is marked on the map and is usually located at a major intersection or other prominent point at the edge of a **zone**. The road(s) that the interviewer should follow and the direction the interviewer should take is also marked on the map created by the local consultant.



- 3.12. Interviewers were instructed to begin in zone 1. Proceeding in the direction instructed at each **starting point**, the goal of the enumerator is to conduct 2 interviews (one services and one manufacturing firm) without leaving the

predetermined road. If he or she is unsuccessful an alternative starting point is defined. Once the interviewer finishes the interview he or she should mark with “x” the location of the interviewed establishment, on a map provided by the contractor.

- 3.13. During the digitalization of the questionnaire, the Google map is updated with the actual location of the surveyed firm. GPS coordinates of the location of all firms are also stored in an Excel file. The map symbols used for starting location and interviewed business should be different.
- 3.14. 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.
 - 3.14.1. Each **sampling zone**, including its two **starting points**, were marked using Google maps, with the GPS coordinates of the starting points being systematically recorded.
 - 3.14.2. Additionally, when obtaining a complete interview, the exact address of the informal business (or where the interview took place) was registered by the interviewer. Once in the office, this address was searched in Google maps, and its GPS coordinates were registered in a fieldwork report.
 - 3.14.3. If no address was immediately available, using local knowledge, the GPS coordinates were determined using imaging via Google maps.
 - 3.14.4. Documentation of this mapping procedure (if available) can be found in the accompanying appendices. In order to preserve confidentiality, the exact coordinates of businesses are not published.

4. Sampling Structure

- 4.1. In **Botswana**, 99 interviews were completed. The breakdown of the final sample was:

City	Interviews
Gaborone	99

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

Activity	Gaborone
Manufacturing of clothes or shoes	7
Manufacturing of baked food (Baker)	8
Manufacturing of coffee, sugar, oil, dry fruits and other processed foods	1
Manufacturing of handcrafts	2
Manufacturing of furniture	10
Manufacturing of metal products	9
Manufacturing of household items	3
Other manufacturing (not included above)	4
Selling food or Groceries	16
Selling of clothes or household items	2
Selling of other goods	9
Selling of business/computer/phone services	2
Transport Services	6
Cleaning and washing services	3
Hairdressers and barber shops	8
Professional Services	1
Repairing services	6
Construction	1
Other services (not included above)	1
Total	99

- 4.3. Due to issues of non-response (see below), in the process of fieldwork, the implementing contractor was unable to obtain the targeted four interviews in each of the originally delineated sectors.
- 4.4. As a result, replacement sectors were delineated, *ex post*. Additionally, the implementing contractor noted that in various interviews there were notable shortfalls in response rates to certain questions. For these reasons, additional interviews were authorized. These were distributed according to the discretion

of the implementing contractor in Botswana, with authorization from the World Bank.

- 4.5. In sum, there were 16 zones in Gaborone, Botswana.

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 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 *ser*. The first is a global-unique identifier. The second is a country-unique identifier.
- 5.4. As noted above, there are two levels of distinction: industry (manufacturing or services) and region. Variable *a3a* denotes the region² (here: urban center) 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 surveys were implemented following a two-stage procedure. In the first stage a screener questionnaire was applied to determine eligibility of a business or activity; once a business or activity was identified as eligible, willing participants were interviewed. While in theory this procedure allows interviewers to schedule an appointment at a later time, in reality, the vast majority of screener and full interviews were realized in immediate succession.
- 5.6. In addition to the screener variables identified above, the screener information section (section Sc.) contains additional 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

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

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.

- 5.7. All data are made available using STATA software. Due to limits imposed by 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 Botswana during fieldwork:

- 6.1.1. *Data Entry.* No major issues were encountered during the data entry.
6.1.2. *Sales figures.* Most of the respondents were willing to provide an estimate of the total sales (96 %) and labor data.

Appendix. Maps

Figure 1. Gaborone Zones 1-14

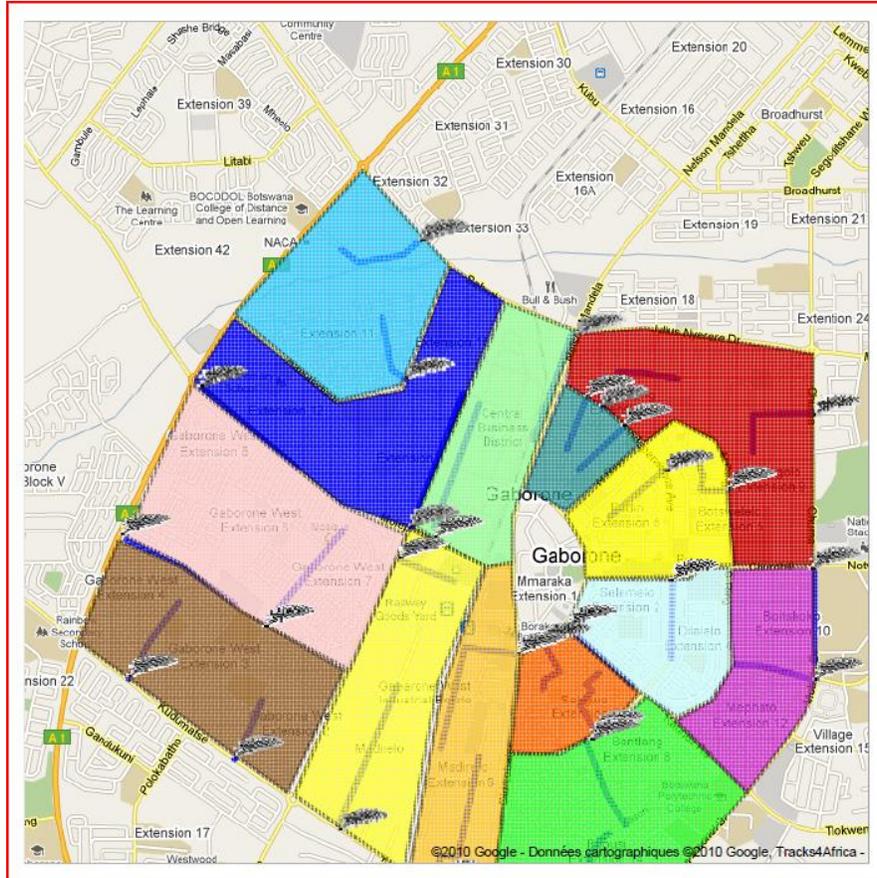


Figure 2. Gaborone Zone 15

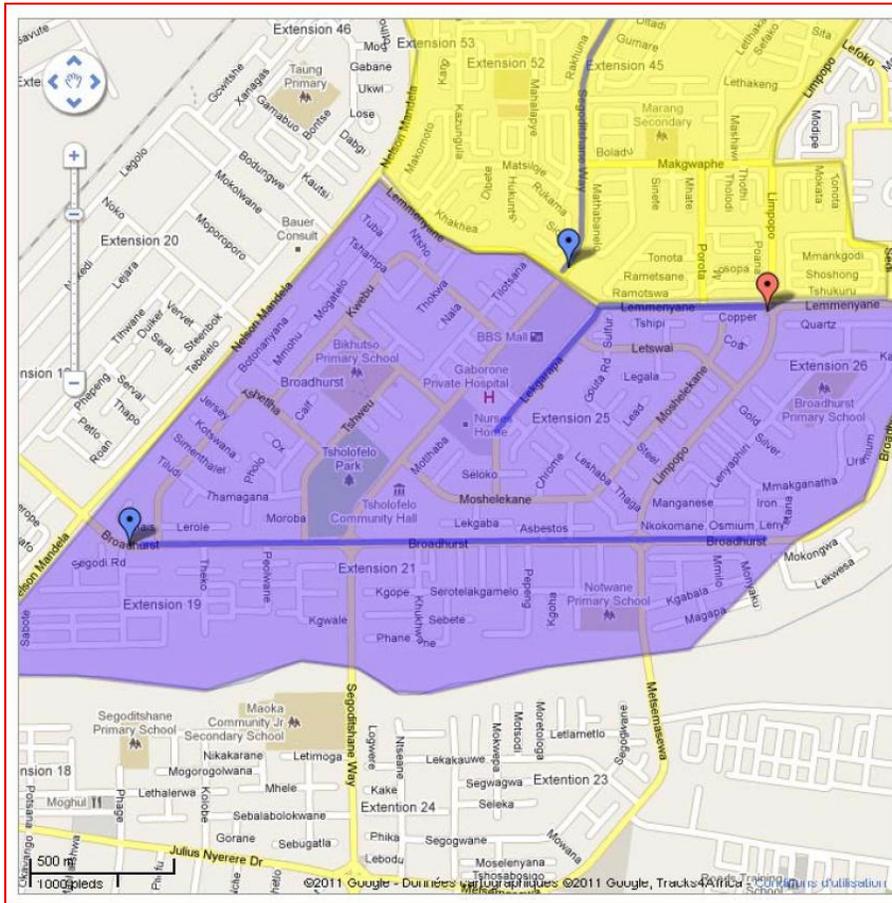


Figure 3. Gaborone Zone 16

