

## Methodology for Ethiopia Survey

The first phase consisted of a national survey of the adult population of Ethiopia. The sample was designed to be representative of the adult population of Ethiopia. Researchers from Bendixen & Amandi (B&A) coordinated and oversaw all aspects of the sampling and interviewing process. A team of local field experts was hired in Ethiopia to conduct the actual interviews. All interviewers were professionally trained and supervised by B&A research personnel. In this phase of the research 2002 Ethiopian adults were interviewed in July and August of 2010. All interviews were conducted in person using traditional Paper and Pencil Interviewing (PAPI) and were administered in Amharic. The survey consisted of 12 questions. The margin of error is approximately  $\pm 2$  percentage points and the 95 percent level of confidence.

The total sample was compiled utilizing multi-stage stratified random sampling through respondent selection. This sampling method enabled B&A to ensure that a representative random sample of Ethiopian adults was collected. There are three stages to this type of sampling methodology. First, after stratifying the Ethiopian population by region and population density, sampling points (SPs)<sup>1</sup> were determined. SPs were then randomly selected within each stratum. In the second stage, using the random route method, dwellings were selected within each SP. The random route method involves selecting an address in each SP at random as a starting point. Each interviewer was given instructions to identify additional dwellings by taking alternate left and right turns and stopping at every Nth dwelling. The third and final stage involved selecting actual participants – for each selected dwelling, individual respondents were chosen using a Kish grid<sup>2</sup>. In a Kish grid, prior to beginning the interview, the interviewer first asks for the ages and genders of every household member (only persons aged 18 or older were eligible for selection). The individual to be interviewed was then chosen based on a random number in the grid.

Every effort was made to achieve the maximum possible coverage, taking cost, timing and other factors into account. A coverage rate of 97% was achieved in the national survey and the 3% of the country that was not covered consisted of areas that were either very remote (and difficult to travel to) or that had extremely small populations. As is the case with most surveys conducted in areas that have significant rural populations, there was some over-representation of people who reside in urban areas. The national data was therefore weighted to be consistent with the most recent official statistics available showing the breakdown of the urban/rural population in Ethiopia – 16% urban and 84% rural.<sup>3</sup>

Once the national survey was completed, B&A analyzed the results to determine the areas of concentration of the remittance recipient population, after which the second phase of the project was conducted. This

<sup>1</sup> Sampling points consisted primarily of municipalities or regions/areas within larger districts or cities.

<sup>2</sup> An example of a Kish grid is attached.

<sup>3</sup> Urban/Rural figures from the Central Statistical Agency of Ethiopia.

phase included a targeted survey of the remittance recipient population in Ethiopia. Sampling Points<sup>4</sup> were established based on B&A’s analysis of the national survey data and the identification of areas of the country that showed concentrations of international remittance receivers in proportion to the sample size of all areas surveyed. Once again, local field experts were hired to conduct the interviews and B&A conducted all training and supervision of field operations. Interviews were conducted in Amharic and all interviews were conducted in person using the PAPI method. A total of 410 interviews with regular international remittance recipients were conducted in Ethiopia during August and September of 2010. The margin of error for the surveys is approximately  $\pm 5$  percentage points and the 95 percent level of confidence.

The survey instrument for phase 2 consisted of approximately 35 questions and included a number of variables aimed at obtaining greater detail about the remittance receiving process and gauging interest various financial products. All surveys were then collected in a centralized location and entered into an electronic data file for analysis. Estimates about remittance amounts and frequency were calculated from the national (phase 1 survey) data and not from the subsequent survey of regular remittance receivers.

### **Example of a Kish grid**

<b>Eligible people</b>	<b><i>Dwelling</i></b>				
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>1</b>	1	1	1	1	1
<b>2</b>	1	2	1	2	1
<b>3</b>	1	2	3	1	2
<b>4</b>	1	2	3	4	1
<b>5</b>	1	2	3	4	5

*Example:*

Assume at the second dwelling in a given SP, there are 4 eligible respondents. Numbers are assigned to each according to age with the youngest eligible respondent being given a 1 and so on as follows:

- 19 year old = 1
- 25 year old = 2
- 27 year old = 3
- 55 year old = 4

We locate the number 2 under “Dwelling” since we are at the second dwelling and then locate the number 4 under “Eligible People” since that is how many possible respondents we have. Since there is a 2 in the cell we will choose the 2<sup>nd</sup> eligible person in the household – the 25 year old.

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<sup>4</sup> Sampling Points for round 2 were established in the following regions: Gergi, Mexico, SNNPR, Saris, Bole, Addis Ababa, Lancha.