

## Appendix C: Survey Methodology

Results for the survey are based on face-to-face interviews conducted under the direction of Princeton Survey Research Associates International. The survey is based on national samples except in Chad and the Democratic Republic of the Congo, where the samples were disproportionately urban. Muslim oversamples were conducted in Ghana, Kenya and Uganda, in addition to a national sample. Oversampling was done via disproportionate sampling in certain locations, rather than by screening for religion. The Muslim samples in Cameroon, the Democratic Republic of the Congo, Ethiopia, Ghana, Kenya, Liberia and Mozambique are disproportionately male (56% or more). Analysis of the survey reveals that the large share of males among Muslims in these countries makes little substantive difference for the survey findings.

The table on the following page shows the sample size and margin of sampling error for three groups (total population, Christians and Muslims) in each country. For results based on the full sample in a given country, one can say with 95% confidence that the error attributable to sampling and other random effects is plus or minus the margin of error. In addition to sampling error, one should bear in mind that question wording and practical difficulties in conducting surveys can introduce error or bias into the findings of opinion polls. The table is followed by additional methodological details for each country.

The survey questionnaire and a topline with full results for the 19 countries surveyed is available on the Pew Forum's website at <http://pewforum.org/docs/?DocID=524>.

## Sample Size and Margin of Error

	Total population		Among Christians		Among Muslims	
	Sample size	Margin of error	Sample size	Margin of error	Sample size	Margin of error
<b>Predominantly Muslim</b>						
Djibouti	1,500	±4 points	<100	NA**	1,452	±4 points
Mali	1,000	±4 points	<100	NA**	901	±5 points
Senegal	1,000	±5 points	103	NA**	891	±5 points
<b>Roughly even mix</b>						
Chad	1,503	±4 points	592	±6 points	811	±5 points
Guinea Bissau	1,000	±4 points	619	±5 points	373	±7 points
Nigeria	1,516	±4 points	678	±6 points	818	±5 points
Tanzania	1,504	±4 points	907	±5 points	539	±6 points
<b>Predominantly Christian</b>						
<i>Large Muslim minority</i>						
Cameroon	1,503	±4 points	1,209	±4 points	245	±9 points
Ethiopia	1,500	±4 points	1,037	±4 points	453	±6 points
Liberia	1,500	±4 points	1,040	±4 points	279	±8 points
Mozambique	1,500	±4 points	942	±5 points	340	±8 points
<i>Small Muslim minority</i>						
DR Congo	1,519	±4 points	1,209	±5 points	185	±10 points
Ghana	1,500*	±5 points	1,148	±5 points	339	±7 points
Kenya	1,500*	±4 points	1,154	±4 points	340	±7 points
Uganda	1,040*	±5 points	711	±6 points	321	±8 points
<i>Few Muslims</i>						
Botswana	1,002	±5 points	868	±6 points	<100	NA**
Rwanda	1,000	±5 points	925	±5 points	<100	NA**
South Africa	1,504	±5 points	1,309	±5 points	<100	NA**
Zambia	1,000	±4 points	976	±4 points	<100	NA**

\*The Ghana, Kenya and Uganda surveys included oversamples of Muslim respondents. In both Ghana and Kenya, interviews were conducted among nationally representative samples of 1,300 respondents and supplemented with 200 additional interviews among Muslims. The Uganda survey was conducted among a nationally representative sample of 832 respondents and supplemented with 208 additional interviews among Muslims.

\*\*Results not reported for samples of fewer than 103 respondents.

## Botswana

Sample design: Stratified random sample of all nine regions (Chobe, in the northern region, is excluded because it is remote and sparsely populated) and all five town councils proportional to population size and urban/rural population.  
Mode: Face-to-face adults 18+  
Languages: Tswana, English  
Fieldwork dates: Dec. 14, 2008 – Jan. 22, 2009  
Representative: Nationally representative adult population

## Cameroon

Sample design: Stratified random sample of all 10 provinces, excluding some parts of the Maroua area of the Extreme Nord province due to inaccessibility and poor infrastructure, proportional to population size and urban/rural population.  
Mode: Face-to-face adults 18+  
Languages: French, English, Fulfulde  
Fieldwork dates: Dec. 11, 2008 – Dec. 24, 2008  
Representative: Nationally representative adult population

## Chad

Sample design: Stratified random sample of accessible areas proportional to population size and urban/rural population.  
Mode: Face-to-face adults 18+  
Languages: French, Chadian Arabic, Gambaye  
Fieldwork dates: Dec. 29, 2008 – Jan. 9, 2009  
Representative: Representative of roughly 70 percent of adult population. The desert region of Borkou-Ennedi-Tibesti is sparsely populated and unsafe for interviewers. Mandoul, Moyen-Chari, Ouaddai, Salamat and Wadi Fira were excluded due to instability. Because of areas excluded, the percentage urban is higher than it would be if the entire country had been sampled.

## Democratic Republic of the Congo

Sample design: Stratified random sample of all 10 provinces plus Kinshasa, excluding inaccessible and unstable areas and some conflict areas along border with Rwanda. Urban settlements in the provinces were slightly oversampled.  
Mode: Face-to-face adults 18+  
Languages: Lingala, Kiswahili, French, Tshiluba, Kikongo  
Fieldwork dates: Feb. 7, 2009 – April 10, 2009  
Representative: Disproportionally urban. Representative of roughly 80 percent of adult population.

## Djibouti

Sample design: Stratified random sample of all six districts proportional to population size and urban/rural population.  
Mode: Face-to-face adults 18+  
Languages: French, Somali, Afar, Arabic  
Fieldwork dates: Jan. 30, 2009 – Feb. 6, 2009  
Representative: Nationally representative adult population

## Ethiopia

Sample design: Stratified random sample of all nine ethnically based states and two self-governing administrative areas proportional to population size and urban/rural population.  
Mode: Face-to-face adults 18+  
Languages: Amhariga, Oromigna, English  
Fieldwork dates: Jan. 22, 2009 – Feb. 1, 2009  
Representative: Nationally representative adult population

## Ghana

Sample design: Stratified random sample of all 10 regions proportional to population size and urban/rural population.  
Mode: Face-to-face adults 18+  
Languages: Akan, English, Dagbani, Ewe, Dagaare, Ga, Hausa, Frafra, Talensi, Guruni, Kusaal  
Fieldwork dates: Jan. 17, 2009 – Jan. 30, 2009  
Representative: Nationally representative adult population with a Muslim oversample

## Guinea Bissau

Sample design: Stratified random sample of all nine geo-political regions proportional to population size and urban/rural population.  
Mode: Face-to-face adults 18+  
Languages: Portuguese  
Fieldwork dates: Jan. 22, 2009 – Feb. 1, 2009  
Representative: Nationally representative adult population

## Kenya

Sample design: Stratified random sample of all seven provinces and the Nairobi area proportional to population size and urban/rural population.  
Mode: Face-to-face adults 18+  
Languages: Kiswahili, English  
Fieldwork dates: Dec. 18, 2008 – Dec. 27, 2008  
Representative: Nationally representative adult population with a Muslim oversample

## Liberia

Sample design: Stratified random sample of all 15 counties proportional to population size and urban/rural population.  
Mode: Face-to-face adults 18+  
Languages: English, Liberian Pidgin English  
Fieldwork dates: Jan. 21, 2009 – Jan. 31, 2009  
Representative: Nationally representative adult population

## Mali

Sample design: Stratified random sample of all eight regions and Bamako proportional to population size and urban/rural population.  
Mode: Face-to-face adults 18+  
Languages: Bambara, French  
Fieldwork dates: Jan. 14, 2009 – Jan. 24, 2009  
Representative: Nationally representative adult population

## Mozambique

Sample design: Stratified random sample of all 10 provinces and Maputo City, proportional to population size and urban/rural population.  
Mode: Face-to-face adults 18+  
Languages: Portuguese, Makua, Changana, Sena, Ndau  
Fieldwork dates: March 5, 2009 – March 30, 2009  
Representative: Nationally representative adult population

## Nigeria

Sample design: Stratified random sample of all seven geo-political regions proportional to population size and urban/rural population.  
Mode: Face-to-face adults 18+  
Languages: English, Hausa, Yoruba, Pidgin, Igbo  
Fieldwork dates: Feb. 15, 2009 – Feb. 25, 2009  
Representative: Nationally representative adult population

## Rwanda

Sample design: Stratified random sample of all 12 districts proportional to population size and urban/rural population.  
Mode: Face-to-face adults 18+  
Languages: Kinyarwanda, French, English  
Fieldwork dates: Jan. 21, 2009 – Jan. 31, 2009  
Representative: Nationally representative adult population

## Senegal

Sample design: Stratified random sample of all 11 regions proportional to population size and urban/rural population.  
Mode: Face-to-face adults 18+  
Languages: Wolof, French  
Fieldwork dates: Jan. 14, 2009 – Jan. 24, 2009  
Representative: Nationally representative adult population

## South Africa

Sample design: Stratified random sample of all nine provinces proportional to population size and urban/rural population.  
Mode: Face-to-face adults 18+  
Languages: Zulu, English, Xhosa, Sesotho (South Sotho), Sepedi (North Sotho), Tswana, Afrikaans, Tsonga, Venda, Ndebele, Swati  
Fieldwork dates: Dec. 12, 2008 – Dec. 26, 2008  
Representative: Nationally representative adult population

## Tanzania

Sample design: Stratified random sample of all 21 regions of mainland Tanzania and Zanzibar (Unguja and Pemba), proportional to population size and urban/rural population.  
Mode: Face-to-face adults 18+  
Languages: Kiswahili, English  
Fieldwork dates: Dec. 15, 2008 – Jan. 6, 2009  
Representative: Nationally representative adult population

## Uganda

Sample design: Stratified area cluster probability sample of all four regions and Kampala proportional to population size and urban/rural population.

Mode: Face-to-face adults 18+

Languages: Luganda, English, Luo, Runyankole, Runyoro-Rutooro, Lugbara, Lumasaba, Lusoga, Ateso, Rukiga, Madi, Runyarwanda, Rukonjo

Fieldwork dates: Feb. 4, 2009 – Feb. 12, 2009

Representative: Nationally representative adult population with a Muslim oversample

## Zambia

Sample design: Stratified random sample of all nine regions proportional to population size and urban/rural population.

Mode: Face-to-face adults 18+

Languages: English, Bemba, Nyanja, Tonga

Fieldwork dates: Jan. 25, 2009 – Feb. 3, 2009

Representative: Nationally representative adult population