

**NETMARK HOUSEHOLD SURVEY
INFORMATION ON SAMPLE AND SES CALCULATION**

COUNTRIES SURVEYED

Country	2000	2003	2004
Mozambique	X		
Uganda	X		
Mali		X	
Nigeria	X		X
Senegal	X		X
Zambia	X		X
Ghana			X
Ethiopia			X

SAMPLE SIZES

The total sample sizes in 2004 were:

1000 in Ethiopia

1500 in Ghana

2000 in Senegal

2000 in Zambia

2000 in Nigeria + **1600** in 4 extra sites = **3600**

SAMPLING PROCEDURE

1- Selection of primary sampling units: There are 5 primary sites in each country, with the exception of Nigeria, where there are 9 (5 from baseline plus 4 additional sites). Purposive sampling was used to select the five primary sites. In all countries surveyed except Ethiopia, the capital city was included (malaria is not a significant problem in Addis Ababa). Further criteria included geo-ethnic diversity and the potential for NetMark to be active in product distribution and/or programs to provide targeted subsidies for vulnerable groups.

2- Selection of sampling points:

Within each site, sampling points were selected from the urban center, from up to 100 kilometers from the urban center, and from 100-200 kilometers from the urban center. This stratification scheme was designed to meet the purposes of the evaluation. Since a key objective of NetMark is to increase ownership of ITNs across the socio-economic spectrum, it was essential to include urban centers with the potential to be reached by product distribution systems, as well as include households located at varying distances from the urban center where lower socio-economic status (SES) individuals typically reside.

The number of sampling points depended on the total sample size in each country. The sampling strategy resulted in an urban-rural ratio of 40:60, which approximates the urban-rural ratio in many African countries today. The specific number of sampling points in each country is as follows:

In Ethiopia: Within each of the sites, 20 sampling points (villages or urban neighborhoods) were randomly selected from electoral or other suitable lists using quota sampling: 8 from within the city (“urban”); 6 up to approximately 50 kilometer radius from the city (“near rural”); and 6 from a 50 to 150 kilometer radius from the city (“far rural”). In each of the sampling points, 10 households were interviewed

In Ghana: Within each of the sites, 30 sampling points (villages or urban neighborhoods) were randomly selected from electoral or other suitable lists using quota sampling: 12 from within the city (“urban”); 9 up to approximately 50 kilometer radius from the city (“near rural”); and 9 from a 50 to 150 kilometer radius from the city (“far rural”). In each of the sampling points, 10 households were interviewed

In Nigeria, Senegal, and Zambia: Within each of the sites, 40 sampling points (villages or urban neighborhoods) were randomly selected from electoral or other suitable lists using quota sampling: 12 from within the city (“urban”); 16 from within 100 kilometer radius from the city (“near rural”); and 16 from within a 100-200 kilometer radius from the city (“far rural”). In each of the sampling points, 10 households were interviewed.

3- Selection of households: Ten interviews were conducted per sampling point, each in a different household. For each sampling point, a starting point (a fixed landmark or address) and the direction from which to start the data collection were chosen. Interviewers were instructed to go to the starting point and walk in the chosen direction until they located a residence with a qualified respondent. After a successful interview, interviewers were instructed to skip five residences (or less if residences were far apart) and seek another qualified respondent.

4- Selection of eligible respondents: An eligible respondent for the evaluation was a female 15-49 years old who was the parent or guardian of a child under five years old, i.e., aged 0-4. Females aged 15-49 were selected to maximize the sample size for calculating the proportion of females of reproductive age sleeping under a net. Similarly, only those women who had a child under five were included, to maximize the sample size for calculating the proportion of children under five sleeping under a net.

HOW THIS SAMPLE MAY DIFFER FROM NATIONAL RANDOM SAMPLES

This sampling procedure was designed to meet the purposes of this study. This procedure may result in findings that would differ from those obtained from a true national random sample, which was neither desirable nor feasible for this study:

- a) Only households with children under five were included in the sample, and households with young children are more likely than others to own a net.
- b) The sample was drawn only from areas where malaria is a problem. Net ownership will be higher in areas where malaria is a problem.
- c) Various organizations have had net/ITN promotional activities in areas in Nigeria included in the study. (See introduction for description.) Because there are five primary sites rather than a randomly distributed sample, if a site is unusually high or low in coverage, it will have a disproportionate impact on the overall ownership and use figures. For example, if a donor or project were particularly active in a site and coverage is very high, that high coverage will count as 20% of the entire sample, even though the site does not account for 20% of the population nationally.
- d) Only women of reproductive age were selected as respondents. Responses from men or from older women may differ from those of the women in the sample.

CALCULATION OF SOCIO-ECONOMIC STATUS (SES)

The socio-economic status (SES) scale was developed from a series of questions on ownership of assets, household characteristics, and level of education. Most of these variables were drawn from the Demographic and Health Surveys (DHS). Principal components analysis was used to extract the main, single factor that accounted for the largest amount of variance in the data. Using the factor scores from the principal component analysis, respondents were divided into quintiles based on their factor scores.