



## 2006 SURVEY ON INSECTICIDE-TREATED NETS IN UGANDA KEY FINDINGS

### HIGHLIGHTS

In 2000, 23% of respondents were aware of treated nets  
In 2006, 98% of respondents were aware of treated nets

In 2000, 30% of households owned a net  
In 2006, 44% of households owned a net

In 2000, 1% of households owned a currently treated ITN\*  
In 2006, 21% of households owned a currently treated ITN\*

In 2000, 21% of children under five slept under a hanging net the prior night  
In 2006, 30% of children under five slept under a hanging net the prior night

In 2000, 1% of children under five slept under an ITN the prior night\*  
In 2006, 14% of children under five slept under an ITN the prior night\*

In 2000, 17% of pregnant women slept under a net the prior night  
In 2006, 29% of pregnant women slept under a net the prior night

In 2000, 1% of pregnant women slept under a currently treated ITN the prior night\*  
In 2006, 13% of pregnant women slept under a currently treated ITN the prior night\*

\*Roll Back Malaria Core Indicator; ITN=long lasting net or one treated within the prior 12 months



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# NETMARK 2006 SURVEY ON INSECTICIDE-TREATED NETS IN UGANDA

## KEY FINDINGS

### BACKGROUND

Malaria is a major cause of morbidity and mortality in Uganda, with 90% of the national population living in highly endemic, primarily rural areas. Insecticide-treated mosquito nets (ITNs) are a central part of the Roll Back Malaria (RBM) strategy for malaria prevention and also a central component of the National Malaria Control Programme (NMCP) of Uganda's Strategic Plan. Uganda's NMCP has employed a market segmentation model, where commercial distribution is promoted among populations who can afford to pay, allowing for government and donor funds to be dedicated to those more in need—for example, distributing free nets in the conflict-affected areas of the north and subsidizing social-marketing nets elsewhere.

To measure the combined impact of ITN activities and to provide a reference point for measuring future progress, NetMark conducted household surveys in Uganda in November 2000 and October – November 2006. Implemented by the Academy for Educational Development (AED), NetMark is a time-limited investment by the United States Agency for Development (USAID) to reduce the burden of malaria in sub-Saharan Africa by increasing the commercial supply of and public demand for ITNs. This is achieved primarily through partnerships with commercial companies and national malaria control programs, and national scale public education and promotional efforts. Uganda Chartered HealthNet (UCH), a Ugandan NGO affiliated with the Makerere University Faculty of Medicine, implemented survey field work with support from AED-Satellite Center for Health Information Technology in 2006, and Research International South Africa implemented fieldwork in 2000. Unlike multiple indicator surveys, NetMark surveys focus exclusively on nets and ITNs and so can provide the in-depth data needed for program and policy decision-making. This summary only covers a few key indicators; a full survey report is forthcoming.

### *Survey Methodology*

The survey was conducted in five primary sites, selected for their geo-ethnic diversity. For security reasons, the conflict areas of the north were excluded. The five sites represent the capital and the Eastern, Central, and Western regions of the country. Each site consists of an urban center (Kampala, Masaka, Mbarara, Hoima and Soroti) and surrounding rural areas in several districts, up to 200km from the center (see table 1). In 2000, urban households were selected from the urban center only. In 2006, urban households were sampled from all municipalities in the districts.

**Table 1. Survey Sites.**

Site	Districts
Kampala	Kampala, Wakiso, Jinja, Mukono
Masaka	Masaka, Rakai, Lyantonde, Sembabule
Mbarara	Mbarara, Ibanda, Kabingo, Kiruhura, Bushenyi, Ntungamo
Hoima	Hoima, Masindi, Kibaale
Soroti	Soroti, Kabermaido, Kumi, Amuria, Katakwi

Using a standardized multi-stage sampling procedure, NetMark selected independent samples of 1,000 households in 2000 and 2,000 households in 2006. Interviewers identified women of reproductive age who were pregnant or caring for a child under five. These women answered questions about ownership of mosquito nets and ITNs, use of nets by family members, net treatment practices and knowledge and beliefs about mosquitoes and malaria. The close-ended questionnaire was translated into English, Luganda, Ateso, Runyoro and Runyakole.

Interviewers used handheld computers (PDAs) to record responses in the 2006 survey, and collected GPS coordinates for each interview. Supervisors downloaded data daily and periodically sent it to an FTP site so NetMark researchers could review data as the survey progressed. This resulted in improved data quality and eliminated the potential for error during data entry of completed paper questionnaires. UCH's experience using handhelds ensured that any technical problems were quickly solved and did not disrupt survey implementation.

## KEY FINDINGS

This summary contains results on awareness and ownership of nets and ITNs, use by vulnerable groups, net treatment, brands and source and cost of nets. The results are summarized on pages 3 through 5, followed by tables of data beginning on page 6. All results presented were calculated using sampling weights based on population size.

This summary uses the following definitions, which are consistent with RBM definitions.

*Net*: any bednet, whether treated or untreated

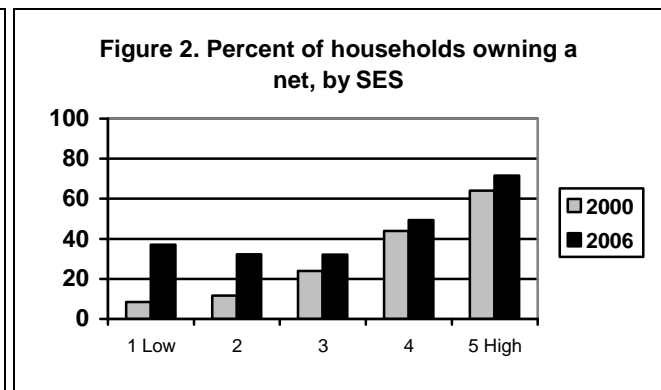
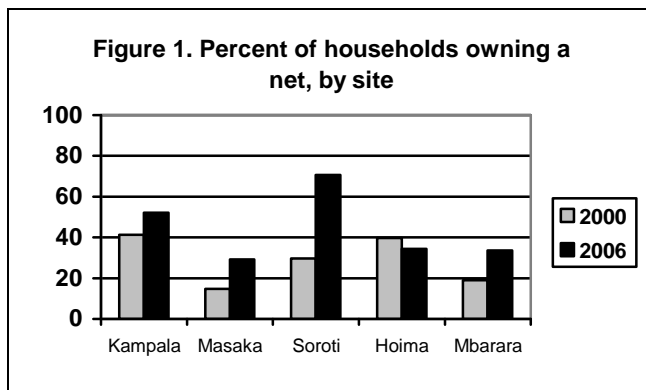
*ITN or currently-treated net*: a net that is an LLIN, or is pre-treated and has been purchased within the last 12 months, or has had insecticide put on it up to and including the last 12 months.

*LLIN*: a net that has a long-lasting insecticide treatment that is effective for up to 20 washes

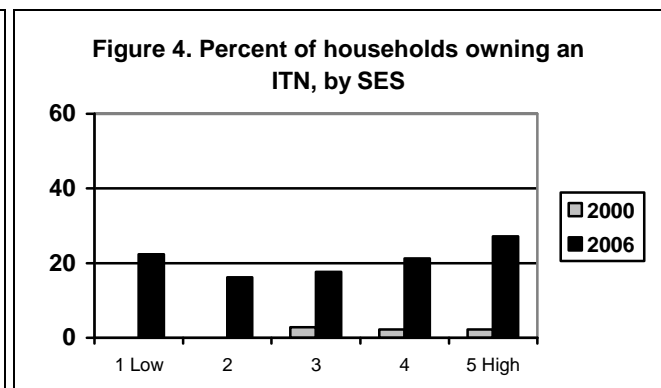
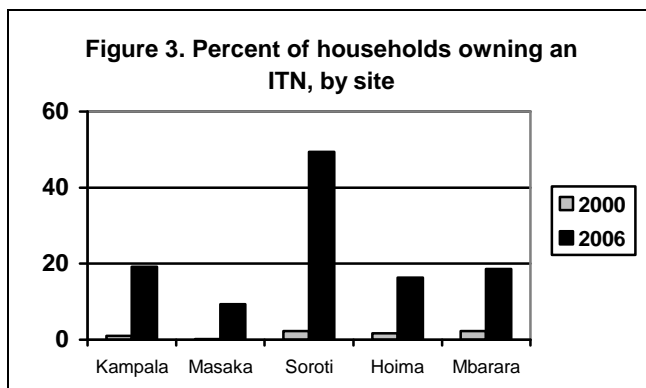
### Awareness and Ownership of Nets and ITNs

In 2000, less than one in four women surveyed had ever heard of treated nets, but by 2006, awareness of treated nets was nearly universal in all sites surveyed and in both rural and urban areas (see table 2).

More households owned at least one net in 2006 than in 2000, increasing from 30% to 44% overall (see table 3). Ownership in urban areas (66%) continues to be higher than in rural areas (39%), but rural areas saw a much greater change, rising from 24% in 2000. Among the five sites surveyed, Soroti had the highest net ownership (71%), followed by Kampala (52%). Masaka had the lowest ownership both years (29% in 2006). Despite a drop in Hoima, just over one third of households there—and in Mbarara—owned a net. While households in the highest socio-economic groups were more likely to own a net than those in the lowest in both years, the poorer groups made more progress resulting in increased equity in 2006.



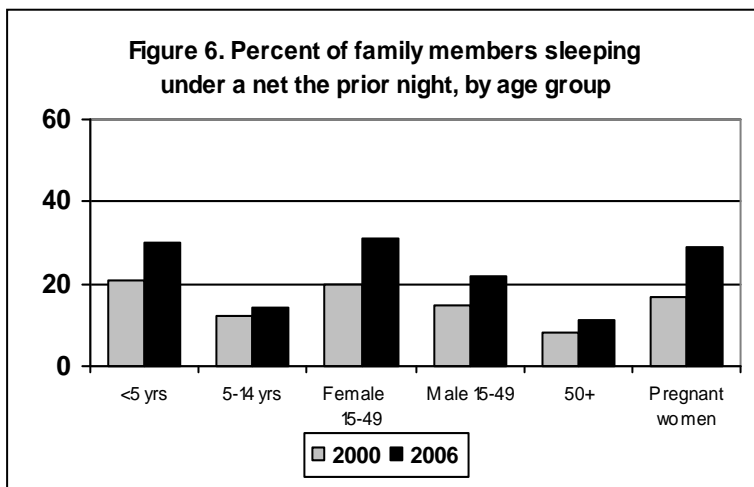
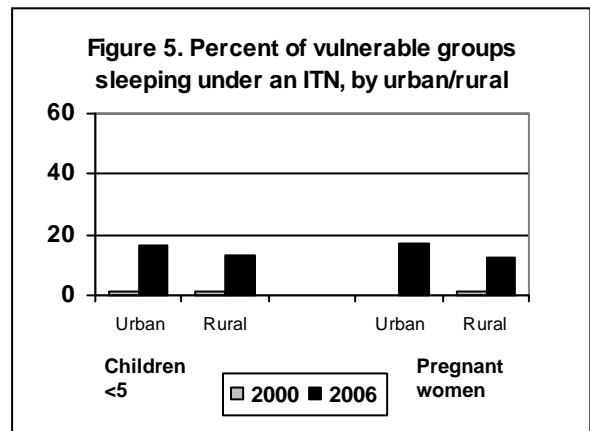
The 2000 survey found very few ITNs, in contrast to the 2006 survey, which found 21% of households owning an ITN: 25% in urban areas and 20% in rural areas (see table 3). More households in Soroti (49%) owned ITNs than in the other sites, where ownership ranged from a low of 9% in Masaka to a high of 19% in Mbarara and Kampala. Ownership of ITNs was quite equitable in 2006, with no clear relationship to socio-economic status.



### Use by Vulnerable Groups

Children under five and pregnant women are most vulnerable to malaria and therefore should be given preference for sleeping under a net. RBM set a target of 60% of each of those two groups to be sleeping under an ITN by 2010. The 2006 survey demonstrated that Uganda has made great progress in the proportion of young children and pregnant women sleeping under nets and ITNs (see table 4).

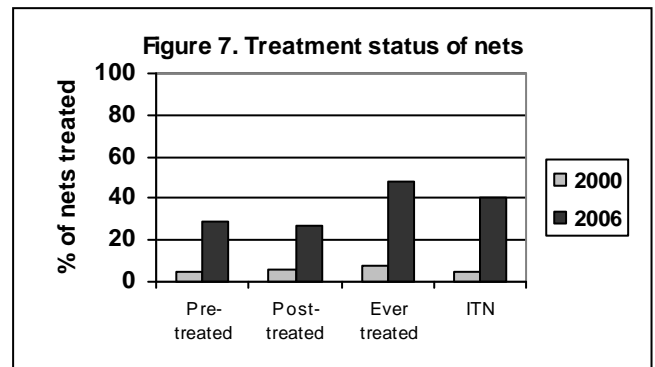
Very young children and pregnant women were equally likely to have slept under a net the night prior to the 2006 survey. Overall, 30% of under fives and 29% of pregnant women slept under a net the previous night, but rates differed according to urban or rural residence: half of urban pregnant women and young children had slept under a net, compared to one in four in rural areas. ITN use among both groups was lower, at 12-13% in rural areas and overall, and 16-17% in urban areas, but this was an increase from only 1% sleeping under an ITN in 2000.



A common misperception about nets and ITNs is that if a household owns a net, it will be used by an adult male, rather than the more vulnerable children and women, particularly pregnant women. Data from the Uganda survey confirms what has been found in NetMark surveys in other countries—that the most vulnerable groups are given preference for sleeping under nets. Adults over 50 and children older than age five, who have acquired some immunity to malaria, were least likely to sleep under a net, followed by adult men.

### Net Treatment

One of the most dramatic changes measured by the survey was the proportion of nets owned that were treated (see table 5). In 2000, few nets had ever been treated (8% of all nets), and even fewer were treated in the previous 12 months, the RBM definition for an ITN. In 2006, approximately half of nets owned had ever been treated, and 40% were currently treated ITNs. Nets were about equally likely to have been acquired pre-treated (29%) and post-treated (27%). Pretreated nets include those treated at the factory level as well as those dipped by health facilities or community groups before nets are sold or distributed, while post-treated nets may have been treated at home with treatment kits packaged with the net or bought separately, or taken to a dipping service at another location. Nets in Hoima were much more likely to be post-treated (43%) than in any other site.



A greater proportion of nets were ITNs in rural areas (44%, compared to 33% in urban areas), in Soroti (55%) and in lower SES groups (49% in the lowest quintile, compared to 33% in the highest). In 2000, no nets in the poorest 40% of households had ever been treated. Nets in Kampala and Masaka sites were least likely to be pretreated, post-treated or currently treated.

## Brands

The 2006 survey found 17 net brands in households, compared to only two in 2000 (see table 6). Interviewers were trained to identify the various net brands available in Uganda and also examined the tags of any nets that had them. All ITNs (including LLINs) sold in Uganda currently have tags, as do a number of untreated nets. Interviewers saw 80% of nets and half of these (39% of all nets) had a tag containing information used to verify the brand and type of net (pretreated, bundled with insecticide or untreated). Nevertheless, the brand was unknown for 30% of all nets.

The most commonly-owned brand was the B52/B58/B62/B68 group of untreated nets, at 17% of all nets. The next most commonly-owned nets were PSI's SmartNet® and SiamDutch/K-O Net®, both with 10%.

Altogether untreated nets, including the B brands, Lucky, Victoria and Famous Net had approximately one-third of market share (30% over all or 40-50% of known brands), except in Soroti, where they made up only 11%.

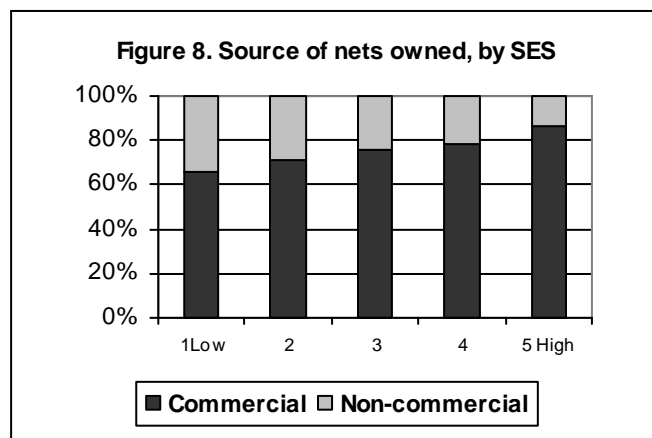
NetMark partners—Cooper Net®, K-O Net®, PermaNet®, Safi Net® and Sleep Net®—accounted for one-fifth of market share, or 30% of known brands. Treated nets, including NetMark partners and PSI nets (SmartNet, Kenya's Supanet and Supanet Extra Power, and Rwanda's Tuzanet), accounted for 40% of all nets. Households in the highest socio-economic quintiles were most likely to own B52s and other untreated brands, and least likely to own a pre-treated or bundled net.

## Source and Cost of Nets

The great majority of nets owned were purchased from commercial sources (78%), in particular markets (29%) and general shops (26%; see table 7). General shops were the most common source of nets in urban areas, in Kampala, Masaka and Hoima, and among the highest wealth quintile (31-36%), while markets were more common in rural areas (34%), in Soroti (53%) and Mbarara (27%), and among the lowest wealth quintile (45%). Hawkers were also a major source of nets in urban areas, in Kampala and among the wealthiest households.

Overall, one-fifth of nets came from non-commercial sources, but these sources accounted for twice as many nets in rural areas (26%) as urban (13%). One-third of nets in the poorest quintile came from non-commercial sources, compared to only 13% in the wealthiest quintile. However, the top quintile had 32% of non-commercial nets, since ownership increased with wealth. Non-commercial nets in urban areas were most likely to come from health facilities (7%) while projects and NGOs were a more common source of nets in rural areas (13%). Projects included micro-credit group Finca, where ITNs are sold at full price but on an extended payment plan, and others that provide nets to particularly vulnerable groups such as people with HIV/AIDS or orphans. In every subgroup, nets in 2006 were more likely than nets in 2000 to come from non-commercial sources, which is consistent with the increased presence of net and ITN programs in the previous five years.

Most nets in 2006 were paid for; only one in ten nets was reported free, although almost one-third of non-commercial nets were reported free (see table 8). (Another seven per cent of nets were "given" to the household. For half of these, the respondent gave the source as "gift", while most of the other half was from non-commercial sources such as projects. Any of these nets may also have been free.) The median net price was 6,000 shillings (US\$3.25<sup>1</sup>) in urban and rural areas and all sites except Soroti, where it was 5,000 shillings (US\$2.71). The median price rose with socio-economic status, from 5,000 among the lowest 40% to 6,000 among the highest 40%. Mbarara had the highest mean price (8,456) and the most variability in price paid, and Soroti had the lowest mean price (5,406) and the least variability.



<sup>1</sup> Dollar conversions are based on average exchange rate for November 2005–November 2006, 1846 Uganda shillings = \$1 US

Net price varied by source (see table 9). The median price was highest at pharmacies, chemists, drug shops and supermarkets (8,000 – 9,000 shillings, or US\$4.34 - \$4.88) and lowest at markets and from itinerant and tabletop vendors (5,000). Nearly half of nets from health facilities were free, but among those that were paid for, the median price (6,000 shillings) was higher than that paid at informal commercial sources such as markets and other vendors (5,000).

## CONCLUSIONS AND IMPLICATIONS

- Net ownership increased in Uganda from 2000 to 2006, with the greatest increases occurring in rural areas and lower socio-economic groups. This suggests that strategies to reach these under-served groups have been successful and should be continued until ownership in rural and poorer households reaches the levels of their urban and wealthier counterparts.
- All household members were much more likely to sleep under an ITN in 2006 than in 2000, and differences by urban/rural and socio-economic status are modest. But differences by site are quite dramatic, particularly among pregnant women, and suggest a need for targeted distribution of ITNs and supporting communication messages—for example, through counseling and vouchers at antenatal clinics.
- Many more nets were treated in Uganda in 2006 than in 2000, yet untreated nets owned still far outnumber ITNs. While LLINs are a long-term solution, implementing mass treatment campaigns and making treatment kits more widely available in the commercial sector will help enable people to convert existing nets into ITNs.
- Most nets in Uganda continue to be purchased from commercial sources, even among the poorest groups, indicating that people value nets and are willing to pay for them. The number of net brands available in Uganda has increased exponentially since 2000, further evidence of the dynamic commercial market.
- Virtually everyone has heard of ITNs, but people are less familiar with specific brands and their characteristics. Generic communication messages should focus on the benefits of ITNs over untreated nets, while brand-specific messages can help people identify which brands are ITNs.
- Most respondents allowed interviewers to examine their nets, and information contained on the tag was useful in identifying the type of net when the respondent was unsure. As manufacturers and distributors increasingly put tags on their nets, these tags can be used to verify the type and origin of the net. Where manufacturers put batch numbers or other information on tags, even more detail can be obtained.
- Kampala and Hoima had the highest levels of net ownership in 2000 but by 2006, ownership in these two sites was surpassed by Soroti. Located in the northeast, Soroti is close to the conflict areas in the north, where large numbers of ITNs have been distributed to displaced populations, which may account for greater availability of and demand for nets. Nets and ITNs of every type are also available in Kampala, while there are fewer outlets in the south and west. The reasons for the drop in net ownership in Hoima are unclear, but it appears that the rural sample in 2006 included more remote villages with poor road access than the sample in 2000.
- Although the different survey designs limit direct comparisons to the 2006 Uganda Demographic and Health Survey (DHS), net and ITN ownership rates from the DHS Preliminary Report are comparable to NetMark findings.
- Using handheld computers for data collection in Uganda is feasible and preferable to paper in terms of speed and data quality. Both interviewers and respondents reacted positively toward the tool.

## TABLES

**Table 2. Percent of respondents who have ever heard of treated nets**

Among all households

	TOTAL	Urban/Rural		Site					Socio-economic status				
		Urban	Rural	Kampala	Masaka	Soroti	Hoima	Mbarara	1 Low	2	3	4	5 High
2000	23.3	19.3	24.3	17.9	35.3	33.4	23.3	18.1	16.1	18.6	28.2	28.2	25.7
2006	97.6	99.1	97.2	98.1	97.5	96.6	99.1	96.5	95.7	96.2	97.6	99.4	99.0
BASE 2000	995	404	591	199	180	210	195	211	181	167	164	205	278
BASE 2006	2122	950	1172	767	348	247	286	474	319	333	355	452	663

**Table 3. Percent of households owning any net and an ITN**

Among all households

	TOTAL	Urban/Rural		Site					Socio-economic status					
		Urban	Rural	Kampala	Masaka	Soroti	Hoima	Mbarara	1 Low	2	3	4	5 High	
Own net	2000	30.4	58.2	23.5	41.3	14.8	29.6	39.7	19.0	8.4	11.6	23.9	43.9	64.1
	2006	44.4	65.6	39.2	52.1	29.2	70.6	34.4	33.6	37.1	32.3	32.1	49.3	71.5
Own ITN	2000	1.4	1.9	1.3	1.0	.2	2.3	1.7	2.3	.0	.0	2.8	2.2	2.2
	2006	20.9	24.5	20.0	19.2	9.3	49.4	16.3	18.6	22.4	16.2	17.7	21.3	27.2
BASE	2000	1000	405	595	200	181	211	197	211	182	169	166	205	278
	2006	2122	950	1172	767	348	247	286	474	319	333	355	452	663

**Table 4. Percent of household members sleeping under a net and ITN the prior night**  
Among all households

	TOTAL	Urban/Rural		Site					Socio-economic Status					
		Urban	Rural	Kampala	Masaka	Soroti	Hoima	Mbarara	1 Low	2	3	4	5 High	
<b>Age 0-4</b>														
Slept under net	2000	20.5	37.0	16.6	26.0	8.3	27.3	29.4	12.8	6.4	10.4	16.0	27.8	41.9
	2006	29.6	47.9	25.4	34.1	11.5	58.9	24.7	20.2	27.5	20.5	20.3	27.3	56.2
Slept under ITN	2000	1.2	1.4	1.1	.8	.2	2.2	1.7	1.7	.0	.0	2.4	1.6	2.0
	2006	13.5	16.4	12.9	11.1	2.8	37.6	11.2	11.8	15.3	10.6	10.7	12.6	19.3
BASE	2000	1361	542	819	254	261	276	279	291	243	237	231	277	373
	2006	3124	1328	1796	1092	537	397	434	664	523	518	526	683	874
<b>Age 5 – 14</b>														
Slept under net	2000	12.2	28.9	10.0	15.2	1.3	19.3	26.3	5.4	5.2	6.3	11.1	16.0	34.9
	2006	13.9	24.5	12.2	13.5	4.6	31.9	9.5	8.2	15.6	7.8	9.4	11.0	31.4
Slept under ITN	2000	.6	1.3	.5	.0	.0	1.0	.7	1.2	.0	.0	1.2	1.4	1.0
	2006	5.5	6.3	5.4	3.1	2.1	16.1	5.8	2.2	6.7	3.3	5.9	3.6	8.6
BASE	2000	1244	457	787	126	253	375	239	251	291	242	180	226	305
	2006	3018	1073	1945	1011	557	532	374	544	614	526	598	622	658
<b>Pregnant Women</b>														
Slept under net	2000	17.3	39.5	12.7	18.4	10.0	29.5	46.4	2.2	3.3	3.1	10.2	13.7	58.0
	2006	29.4	48.2	25.4	29.4	13.4	72.0	9.8	21.3	31.2	14.5	22.2	33.2	45.4
Slept under ITN	2000	1.3	.0	1.5	2.4	.0	.0	.0	.0	.0	.0	.0	.0	6.4
	2006	13.3	17.3	12.4	11.0	.0	44.3	.7	9.6	17.3	2.1	10.2	20.4	15.1
BASE	2000	130	52	78	40	21	19	22	28	23	23	19	29	36
	2006	362	160	202	110	47	58	49	98	67	48	59	76	112
<b>Age 15 - 49 Female</b>														
Slept under net	2000	20.4	37.1	16.3	25.2	9.0	21.8	33.3	12.8	5.9	7.8	15.7	32.5	40.9
	2006	30.5	45.7	26.6	34.9	13.8	53.6	25.7	23.1	27.3	20.8	21.2	30.9	51.9
Slept under ITN	2000	.9	.4	1.0	.8	.1	1.8	.1	1.7	.0	.0	1.1	1.5	2.1
	2006	14.0	17.3	13.2	13.0	3.7	34.0	11.8	11.9	15.7	8.9	11.4	14.4	19.8
BASE	2000	1219	497	722	250	212	249	233	275	226	209	197	234	353
	2006	2544	1159	1385	944	416	324	330	530	385	395	426	529	809
<b>Age 15 - 49 Male</b>														
Slept under net	2000	15.3	23.1	13.8	17.7	9.5	9.8	27.1	12.5	5.5	3.9	15.0	23.0	35.0
	2006	22.3	40.6	18.2	30.3	10.2	25.2	15.2	20.6	13.1	15.5	14.4	23.4	44.8
Slept under ITN	2000	.8	.3	.9	.0	.0	.9	.1	2.8	.0	.0	1.7	2.1	.3
	2006	8.5	13.3	7.4	9.3	2.6	10.7	5.8	11.5	5.3	5.2	6.3	10.7	15.0
BASE	2000	819	298	521	143	129	212	175	160	180	143	130	167	199
	2006	1837	780	1057	640	297	258	249	393	282	294	309	374	578
<b>Age 50 or older</b>														
Slept under net	2000	7.6	47.3	2.0	9.6	.0	5.7	22.6	.0	.0	.0	.0	23.3	28.6
	2006	10.9	15.9	10.2	10.4	9.9	9.7	17.4	11.2	8.3	4.0	14.8	18.7	17.1
Slept under ITN	2000	.1	1.1	.0	.0	.0	1.4	.0	.0	.0	.0	.0	.0	.8
	2006	5.2	5.2	5.2	3.0	6.1	8.7	5.8	3.0	.0	2.1	14.8	7.1	4.9
BASE	2000	99	30	69	35	5	23	16	20	24	22	14	11	28
	2006	224	68	156	66	46	47	20	45	53	53	43	44	31

**Table 5. Treatment status of nets**  
Among all nets owned

		TOTAL	Urban/Rural		Sites					Socio-economic status				
			Urban	Rural	Kampala	Masaka	Soroti	Hoima	Mbarara	1 Low	2	3	4	5 High
Pre-treated (treated before acquired)	2000	4.4	2.6	5.6	.9	6.8	4.0	2.4	20.8	.0	.0	17.2	3.9	2.3
	2006	29.1	21.7	32.6	19.5	21.0	47.7	25.1	37.8	42.3	28.9	39.3	26.1	21.9
Post-treated (treated since acquired)	2000	6.1	6.2	6.1	4.9	1.4	8.2	3.5	14.7	.0	.0	9.8	9.2	5.1
	2006	26.8	22.5	28.8	23.9	22.3	27.1	42.5	27.8	23.0	32.2	34.2	26.5	23.8
Net ever treated (pre or post-treated)	2000	7.7	6.8	8.2	4.9	8.2	8.6	3.5	23.5	.0	.0	17.2	9.2	6.3
	2006	48.1	38.5	52.4	38.3	35.0	61.9	58.2	58.0	57.9	51.4	60.5	45.9	39.5
Currently treated (treated <12 months ago; ITN)	2000	4.6	2.8	5.8	2.3	1.9	7.9	2.3	14.4	.0	.0	9.8	6.1	3.6
	2006	40.4	32.6	43.9	32.3	27.7	55.4	44.0	47.2	49.1	42.1	52.0	38.7	32.8
BASE	2000	586	341	245	123	50	181	140	92	30	40	64	126	326
	2006	1734	1044	690	693	236	334	199	272	175	145	178	339	897

**Table 6. Net brands owned – 2006**

Among all nets owned

	TOTAL	Urban/Rural		Site					Socio-economic status				
		Urban	Rural	Kampala	Masaka	Soroti	Hoima	Mbarara	1 Low	2	3	4	5 High
<b>ITNs</b>	<b>40.1</b>	<b>35.5</b>	<b>42.2</b>	<b>35.7</b>	<b>40.1</b>	<b>43.6</b>	<b>48.5</b>	<b>41.6</b>	<b>43.4</b>	<b>44.4</b>	<b>43.3</b>	<b>40.4</b>	<b>35.8</b>
KO Net	8.1	9.6	7.3	10.7	16.9	2.2	7.1	3.9	5.5	11.5	2.2	8.3	9.9
Siam Dutch	1.5	1.0	1.7	1.1	.0	1.3	7.0	.4	1.4	1.3	1.8	1.9	1.3
Smart Net	9.7	7.2	10.9	6.2	12.7	10.7	20.9	9.5	7.6	12.0	13.5	10.7	7.9
PermaNet	6.4	6.8	6.2	6.4	1.5	6.0	8.1	9.0	7.1	4.4	9.8	4.3	6.6
Supanet	4.1	3.3	4.5	2.2	0	13.6	0.6	0.1	10.2	3.7	3.9	4.1	1.9
Tuzanet	2.8	1.2	3.6	1.7	0	0.4	0.1	13.5	2.6	2.9	3.5	3.4	2.3
Olyset	2.2	0.4	3.1	0.7	1.3	7.5	0.9	0	6.2	3.4	3.8	1.2	0.2
Sleepnet	2.1	2.1	2.0	2.8	2.9	0	2.8	1.9	0	2.4	1.1	2.5	2.8
Coopernet	1.5	2.2	1.2	2.1	3.4	0.5	1	0.2	1.3	1.4	0.8	1.9	1.6
Safinet	1.4	1.3	1.4	1.2	1.4	1.1	0	3.1	1.5	1.4	2.8	1.3	0.8
NetMark*	0.2	0	0.3	0.5	0	0	0	0	0	0	0	0.5	0.3
Mmbu	0.1	0.4	0	0.1	0	0.3	0	0	0	0	0.1	0.3	0.2
<b>Untreated nets</b>	<b>29.5</b>	<b>35.5</b>	<b>27.0</b>	<b>36.2</b>	<b>34.3</b>	<b>10.5</b>	<b>30.2</b>	<b>36.0</b>	<b>15.1</b>	<b>24.8</b>	<b>26.8</b>	<b>35.3</b>	<b>35.1</b>
B52, B58, B62, B68	17.2	19.6	16.2	23.4	11.8	7.8	26.5	10.6	7.8	12.7	16.3	21.3	20.8
Lucky	8.7	9.6	8.3	7.4	19.3	0.9	3.7	21.5	5.8	8.2	10.5	9.3	9.1
Unknown Chinese brand**	3.3	5.6	2.2	5.0	2.0	1.8	0	3.2	1.5	3.9	0	3.4	4.9
Victoria	0.2	0.2	0.2	0.1	1.2	0	0	0	0	0	0	0.6	0.1
Famous Net	0.1	0	0.1	0	0	0	0	0.7	0	0	0	0.5	0
Ndoto Njema	0	0	0	0	0	0	0	0	0	0	0	0	0
Mark	0	0.1	0	0.1	0	0	0	0	0	0	0	0.2	0
Best	0	0.2	0	0.1	0	0	0	0	0	0	0	0	0.1
Bamboo Hut	0	0.2	0	0.1	0	0	0	0	0	0	0	0	0.1
Tailor-made	.7	.1	1.0	.0	.0	3.1	.1	.0	.6	2.9	1.4	.1	.0
<b>Don't know</b>	<b>29.6</b>	<b>28.9</b>	<b>30.0</b>	<b>28.0</b>	<b>25.6</b>	<b>42.7</b>	<b>21.1</b>	<b>22.4</b>	<b>41.1</b>	<b>27.9</b>	<b>28.5</b>	<b>24.2</b>	<b>29.0</b>
BASE	1734	1044	690	693	236	334	199	272	175	145	178	339	897

\*NetMark is not a brand, but the NetMark logo appears on nets supplied by partners. Some respondents identified their nets as NetMark brand.

\*\*Tag says "NewStar International, Made in China" but brand unknown. NewStar is distributor of B52 etc. and Lucky

**Table 6a. Net brands owned – 2000**

Among all nets owned

	TOTAL	Urban/Rural		Site					Socio-economic status				
		Urban	Rural	Kampala	Masaka	Soroti	Hoima	Mbarara	1 Low	2	3	4	5 High
PowerNET	16.1	19.2	14.2	28.6	5.4	8.4	4.4	.9	6.0	7.9	5.8	6.6	27.1
RAID	.2	.0	.3	.0	.0	1.4	.0	.0	3.0	.0	.0	.0	.0
Foreign	.2	.0	.3	.0	.0	.0	1.1	.0	.0	.0	.0	.8	.0
Other	.6	.2	.8	.0	5.4	1.3	.0	.3	3.0	.0	.0	1.2	.1
Tailor-made	8.4	13.2	5.4	10.2	5.8	21.4	.0	.0	32.8	7.9	5.0	3.2	9.0
<b>Don't know</b>	<b>74.5</b>	<b>67.3</b>	<b>79.0</b>	<b>61.2</b>	<b>83.4</b>	<b>67.5</b>	<b>94.5</b>	<b>98.8</b>	<b>55.2</b>	<b>84.1</b>	<b>89.2</b>	<b>88.3</b>	<b>63.7</b>
BASE	586	341	245	123	50	181	140	92	30	40	64	126	326

**Table 7a. Source of nets - 2006**

Among nets where source is known (Don't know = 10%)

	TOTAL	Urban/Rural		Site					Socio-economic status				
		Urban	Rural	Kampala	Masaka	Soroti	Hoima	Mbarara	1 Low	2	3	4	5 High
<b>COMMERCIAL</b>	<b>78.0</b>	<b>86.7</b>	<b>74.5</b>	<b>85.3</b>	<b>74.8</b>	<b>73.2</b>	<b>75.1</b>	<b>68.0</b>	<b>66.1</b>	<b>71.6</b>	<b>75.8</b>	<b>78.2</b>	<b>86.8</b>
Open Air/ structured market	24.1	11.9	29.5	13.7	12.9	51.6	20.8	17.4	41.9	31.6	32.4	21.6	11.4
Enclosed market	4.8	5.4	4.6	5.0	8.9	.7	3.8	9.5	3.5	8.1	5.2	1.9	5.6
Local kiosk	.6	1.6	.2	1.1	.0	.4	.0	.0	.0	.0	.0	.6	1.3
Itinerant vendor / hawker	12.1	22.2	7.8	21.2	5.5	4.1	7.4	6.2	4.4	8.2	8.0	13.6	18.0
Street /table top vendor	.9	1.7	.5	1.3	1.8	.1	.0	.9	.0	.3	.8	1.6	1.1
General shop / duka	25.7	31.3	23.2	33.1	31.9	11.8	35.5	16.9	12.1	14.5	17.9	31.2	36.2
Pharmacy/ chemist	2.5	2.9	2.3	2.1	.5	.3	.0	9.9	.7	.0	2.5	1.2	4.9
Drug shop	.5	.8	.3	.4	.0	.0	1.5	1.0	.0	.0	.0	.1	1.2
Supermarket	2.4	5.1	1.2	4.3	1.0	.2	2.0	1.7	.0	.0	1.6	1.6	5.1
Tailor	.3	.0	.5	.0	.0	1.3	.0	.0	2.0	.0	.0	.0	.0
Wholesaler	.2	.8	.0	.5	.0	.1	.0	.1	.1	.0	.0	.3	.5
Employer	.4	.2	.5	.1	.0	1.3	.0	.0	.0	.0	2.4	.0	.2
Gift	3.5	2.8	3.9	2.5	12.3	1.3	4.1	4.4	1.4	8.9	5.0	4.5	1.3
<b>NON-COMMERCIAL</b>	<b>22.1</b>	<b>13.4</b>	<b>25.8</b>	<b>14.4</b>	<b>25.2</b>	<b>26.7</b>	<b>24.9</b>	<b>32.0</b>	<b>33.9</b>	<b>28.6</b>	<b>24.5</b>	<b>21.8</b>	<b>13.1</b>
Project/ NGO	9.8	3.7	12.5	2.3	16.7	12.7	20.1	15.7	16.1	14.3	11.2	9.5	4.8
Health facility	8.1	6.7	8.7	9.7	2.3	8.7	4.7	8.0	8.7	7.8	11.5	8.1	6.5
Child health week/ vaccination campaign	.4	.4	.4	.1	.0	1.0	.0	.4	1.7	.0	.0	.1	.2
School	.4	.0	.5	.0	2.9	.4	.0	.0	.7	.0	.0	1.3	.0
Women's Group	1.0	1.6	.8	1.5	1.6	.0	.1	1.6	.7	2.6	.8	.1	1.2
District/local government	1.1	.2	1.4	.0	1.6	.0	.0	6.3	2.2	1.5	.9	1.8	.0
Other	1.3	.8	1.5	.8	.1	3.9	.0	.0	3.8	2.4	.1	.9	.4
BASE	1527	903	624	597	191	325	176	238	166	135	157	300	769

**Table 7b. Source of nets - 2000**

Among nets where source is known (Don't know = 3%)

	TOTAL	Urban/Rural		Sites					Socio-economic status				
		Urban	Rural	Kampala	Masaka	Soroti	Hoima	Mbarara	1 Low	2	3	4	5 High
<b>COMMERCIAL</b>	<b>94.8</b>	<b>97.8</b>	<b>92.9</b>	<b>99.0</b>	<b>94.6</b>	<b>92.6</b>	<b>84.0</b>	<b>98.8</b>	<b>97.1</b>	<b>99.9</b>	<b>88.6</b>	<b>94.5</b>	<b>95.8</b>
Market	16.9	15.0	18.0	15.0	10.5	37.2	11.2	11.2	51.8	37.1	17.0	14.7	9.9
Kiosk	1.0	.0	1.6	.8	.0	.0	3.4	.0	.0	.0	.0	.0	2.2
Street vendor	14.3	23.6	8.6	25.4	.5	2.9	3.5	11.2	17.0	3.2	.0	12.4	20.9
Hawkers/moving kiosk	2.4	4.8	1.0	3.6	.0	2.7	1.1	.9	.0	5.3	.0	5.0	1.6
General shop	39.3	42.1	37.6	42.2	32.3	39.3	28.2	49.3	25.3	42.5	43.9	36.6	41.0
Textile shop	4.7	1.2	6.8	.0	12.4	7.0	14.0	.9	3.0	2.7	3.2	7.0	4.4
Wholesaler	6.8	3.0	9.1	4.2	7.0	.0	18.2	6.6	.0	.0	10.8	9.9	5.9
Pharmacy	2.6	.2	4.0	.8	5.0	.0	2.2	11.5	.0	4.9	4.9	4.0	1.1
Supermarket	.7	.9	.6	.0	.5	.9	.0	4.2	.0	.0	.0	1.3	.8
Gift	6.1	7.0	5.6	7.0	26.4	2.6	2.2	3.0	.0	4.2	8.8	3.6	8.0
<b>NON-COMMERCIAL</b>	<b>5.2</b>	<b>2.1</b>	<b>7.1</b>	<b>0.9</b>	<b>5.5</b>	<b>7.5</b>	<b>15.9</b>	<b>1.2</b>	<b>3.0</b>	<b>0</b>	<b>11.3</b>	<b>5.4</b>	<b>4.3</b>
Project	1.5	1.6	1.3	.9	.5	3.5	2.4	.0	.0	.0	3.1	2.5	.8
Clinic	3.3	.5	5.0	.0	5.0	3.9	11.3	1.2	3.0	.0	8.2	1.3	3.5
Organization	.2	.0	.4	.0	.0	.1	1.1	.0	.0	.0	.0	.8	.0
Other	.2	.0	.4	.0	.0	.0	1.1	.0	.0	.0	.0	.8	.0
BASE	568	329	239	115	46	180	136	91	30	38	62	122	316

**Table 8. Cost of nets – 2006**

Among all nets

	TOTAL	Urban/Rural		Site					Socio-economic status				
		Urban	Rural	Kampala	Masaka	Soroti	Hoima	Mbarara	1 Low	2	3	4	5 High
Trade/barter	.3	.4	.3	.3	.0	.4	.0	.7	1.3	.0	.0	.0	.3
Free	9.1	5.0	11.0	5.5	13.7	13.9	2.2	14.4	18.9	7.1	12.6	10.0	4.2
Given by someone*	7.3	3.6	9.0	4.0	19.3	10.0	4.5	7.4	13.1	17.6	4.4	7.0	2.5
Don't know price**	15.5	18.2	14.3	20.1	15.2	7.3	15.1	15.0	8.5	9.2	13.2	17.4	20.5
Price specified	67.7	72.8	65.4	70.2	51.8	68.4	78.2	62.6	58.2	66.1	69.8	65.6	72.5
BASE	1734	1044	690	693	236	334	199	272	175	145	178	339	897
<b>AMONG NETS PAID FOR</b>													
Mean price (shillings)	7,184	7,692	6,924	7,965	7,140	5,406	6,109	8,456	5,839	6,017	6,286	8,301	7,777
Standard Deviation	6256	5289	6688	8081	3281	1759	2228	6755	2167	2861	3213	11463	4903
Median price (shillings)	6,000	6,000	6,000	6,000	6,000	5,000	6,000	6,000	5,000	5,000	5,500	6,000	6,000
BASE	1206	752	454	498	142	240	152	174	100	97	123	226	660

\*Nets that were "given by someone" include gifts and other nets that may have been paid for or may have been received for free

\*\*Nets that were paid for but respondent does not know price

**Table 9. Cost of nets by source – 2006**

Among sources of 10 or more nets

	Open Air/ structured market	Enclosed market	Itinerant vendor / hawker	Street/ table top vendor	General shop/ duka	Pharmacy / chemist	Drug shop	Super market	Project (e.g., NGO)	Health facility	Women's Group	District/ local governme nt
Trade/barter	.5	1.4	.0	.0	.3	.0	.0	.0	.0	.0	.0	10.4
Free	.2	.0	.1	.0	.9	.0	.0	.0	41.8	43.3	13.7	44.4
Given by someone*	.0	.0	.9	.0	.9	4.5	.0	.0	27.3	4.2	9.3	33.8
Don't know price**	7.3	3.7	7.1	13.2	19.9	9.1	2.7	8.7	1.9	.7	5.2	1.3
Price specified	92.0	95.0	91.8	86.8	78.1	86.4	97.3	91.3	29.0	51.8	71.8	10.0
BASE	285	73	221	17	446	42	11	51	136	119	16	14
<b>AMONG NETS PAID FOR</b>												
Mean price (shillings)	6,330	5,681	6,176	6,052	7,858	9,367	10,922	11,116	5,030	10,859	5,216	12,000
Standard Deviation	4509	1510	2546	3005	3896	2499	5490	12166	2884	19306	4434	0
Median price (shillings)	5,000	5,000	5,000	5,000	7,000	9,000	8,000	8,500	4,000	6,000	5,000	12,000
BASE	258	66	206	14	361	38	10	46	45	69	12	1

\*Nets that were "given by someone" include gifts and other nets that may have been paid for or may have been received for free

\*\*Nets that were paid for but respondent does not know price