Monitoring and Evaluation of the TNVS

Report on Second Round of Retail Census of the Tanzanian National Voucher Scheme

Jo Mulligan[1]
Samwel Ebenezeri[2]
Eliakim Mtwara[2]
Godlove Stephen[2]
Kara Hanson[1]

[1] London School of Hygiene and Tropical Medicine
[2] Ifakara Health Research and Development Centre

November 2007

Version 2

Contents

List of tables

List of Figures

Acknowledgements

This study was undertaken by the Ifakara Health Research and Development Centre and London School of Hygiene and Tropical Medicine with the support of the Tanzania National Voucher Scheme stakeholders. We are indebted to the respondents who voluntarily offered their time for interviews and shared the useful information without which the survey would not have been possible. We thank the Global Fund to fight AIDS, Tuberculosis and Malaria (GFATM) that financially supported the survey through the Tanzania Ministry of Health.

Executive Summary

This report presents the findings of the 2006/7 retail audit and examines the changes in the retail market for ITNs that occurred between the 2005 and 2006/7 surveys. The retail census involved two survey rounds in each district. Data for the first round were collected in the twenty one sample districts from April to October 2005 and can be considered the ‘baseline’. The second round of data collection began in April 2006 and ended in January 2007.

The **main** findings are:

- In non major trading centres the proportion of wards with at least one outlet stocking a net kit almost doubled from 35% to 65%. In major trading centres the proportion increased from 79% in 2005 to 91% in 2006/7.

- An increase in net kit availability in outlets appears to be associated with an increase in under-five net and ITN coverage rates at the district level.

- Retailers do not appear to be charging significantly higher prices for nets paid with a voucher.

Other findings include:

- The proportion of outlets stocking net kits is higher in major trading centres than non major trading centres (22%, 17% respectively). Few outlets in our sample were stocking long lasting nets at the time of both surveys.

- In contrast to net kits, the proportion of outlets accepting vouchers was higher among outlets in non major trading centres than major trading centres (9%, 4% respectively)

- The proportion of outlets aware of the scheme rose substantially from 47% to 86% in both major and non major trading centres.

- Of outlets which were accepting vouchers, the vast majority (more than 80%) in both survey rounds reported that they were satisfied with the redemption process. Of those outlets not accepting vouchers, 66% expressed a willingness to be involved in the voucher scheme in the future.

- In terms of market share Safi net continues to dominate the market with more than 50% of outlets stocking these nets, followed by Mbu net. Other brands of nets included Chitetezo from Malawi, Chinese nets, Supernet, Zuia mbu and ABC from Uganda. The second survey round saw the appearance of brands of long lasting nets – Olyset and Permanet. However the relative share is still small at less than 3%.

- Very few outlets were displaying any point of sales materials (i.e. stickers/posters) for nets at the time of the census (3.4% of outlets). Point of sales of materials for ngao and insecticides were more widely available (11.7% of outlets).

Introduction

In October 2005 the Tanzania government, through funds from the Global Fund for HIV/AIDS, Tuberculosis and Malaria launched the Tanzania National Voucher Scheme (TNVS), a nationwide discounted voucher scheme for ITNs for pregnant women. Vouchers (worth 2750 Tshs each) are distributed to pregnant women at antenatal clinics and redeemed as part-payment for an ITN at designated private outlets.

The TNVS is expected to support a rapid expansion of ITN use by both pregnant women and their infants. In addition, it is hoped that the TNVS will encourage private sector involvement in the manufacture of ITNs and their delivery to poorer communities, since there will be widespread and predictable demand for ITNs by pregnant women.

The London School of Hygiene and Tropical Medicine and Ifakara Health Research and Development Centre have been contracted to do the Monitoring and Evaluation (M&E) of the scheme. This paper reports on the retail census component. The main objective of the retail census is to study the contribution of the private sector to the scheme and document the latter's influence on the private market. Specifically the census aims to:

- Evaluate the impact of TNVS on ITN[1] availability.
- Assess the availability of shops accepting vouchers.
- Evaluate the impact of TNVS on ITN prices.
- Provide an estimate of the average top-up price – across districts and shape/size of ITNs.

This report presents the findings of the 2006/7 retail audit and examines the changes in the retail market for ITNs that occurred between the 2005 and 2006/7 surveys. The retail census involved two survey rounds in each district. Data for the first round were collected in the twenty one sample districts from April to October 2005. The second round of data collection began in April 2006 and ended in January 2007.

Methods

For the purposes of the M&E, districts were stratified by Hati Punguzo launch date and 21 districts were randomly selected (see Table 1 for list of districts selected). A sampling approach was developed to assess availability of ITN products throughout the district. This uses the ward as the unit of sampling, with a sampling fraction of at least 30% of wards. The number of wards in a district was multiplied by 0.3, to give 30%, and rounded up to the nearest whole number. Within each district we defined the ward as the sampling unit and wards were classified as either ‘major trading centres’ (MTCs) or ‘non major trading centres’ (see Appendix 1 for more details). Each selected ward was visited in order to undertake an assessment of availability of ITN products in a trading centre. Within each ward, the village or town bearing the same name as the

[1] The term ITN and ‘net kits’ are used interchangeably throughout this report and refers to a net packaged with insecticide.

selected ward was visited on the assumption that this was the centre for trade (and administration) within the ward. This assumption was verified with local informants wherever possible.

In each outlet a short questionnaire was administered by a trained interviewer which collected information about: the characteristics of the shop; whether or not they stocked ITN products (nets and insecticide); the prices of these products; and other items stocked. The appendix provides detailed information on how outlets were selected for inclusion in the survey. Data from the survey were double entered using EPI-Info software. Data analysis was carried out using Stata v.9 software. The *svy* commands were used to analyse the price data to allow the confidence intervals of estimated parameters to be adjusted for the cluster structure of the survey. It is important to note that for many districts the first survey occurred after or during the official launch period so that it does not represent a "true" baseline.

The retail census involved two survey rounds in each district. The first round was undertaken between April and October 2005 and, subject to the above caveat, can be considered as the 'baseline'. The second round was undertaken between April 2006 and January 2007. Table 1 below shows the official launch dates, the census dates and 'exposure period' (the number of days in which the scheme had been operating before the first census took place). Among districts that had already launched the mean time that the scheme had been operating before the first census was 4 months.

Table 1: Launching and retail census dates for survey districts

Districts	Number of wards	Official launching dates	Round 1 Census start date	R1 Days since launch at survey date	Round 2 Census start date	R2 Days since launch at survey date	No. days between R1 and R2
Dodoma rural	14	25-Oct-04	16-May-05	203	04-May-06	556	353
Tanga	8	04-Dec-04	08-Apr-05	125	24-Apr-06	506	381
Kilombero	6	23-Dec-04	01-May-05	129	10-May-06	503	374
Igunga	8	09-Jan-05	14-Jul-05	186	24-May-06	500	314
Rufiji	6	25-Feb-05	21-Jun-05	116	27-Jun-06	487	371
Bagamoyo	4	01-Mar-05	17-Jun-05	108	10-Jun-06	466	358
Sumbawanga rural	8	20-Mar-05	03-Oct-05	197	11-Dec-06	631	434
Ludewa	6	20-Mar-05	09-Oct-05	203	08-Dec-06	628	425
Same	8	18-Apr-05	22-Apr-05	4	01-Apr-06	348	344
Singida	4	25-Apr-05	28-Jun-05	64	14-Jun-06	415	351
Nachingwea	8	20-May-05	26-Jun-05	37	05-Jun-06	381	344
Tabora rural	6	08-Jun-05	15-Jul-05	37	14-Jul-06	401	364
Meatu	6	11-Jul-05	21-Aug-05	41	28-Dec-06	535	494
Tandahimba	8	18-Jul-05	24-Jun-05	-24	26-Jun-06	343	367
Karatu	4	29-Jul-05	04-Jul-05	-25	20-Jul-06	356	381
Magu	8	20-Sep-05	01-Aug-05	-50	18-Dec-06	454	504

Districts	Number of wards	Official launching dates	Round 1 Census start date	R1 Days since launch at survey date	Round 2 Census start date	R2 Days since launch at survey date	No. days between R1 and R2
Bunda	6	05-Oct-05	16-Aug-05	-50	12-Dec-06	433	483
Kibondo	6	21-Oct-05	15-Aug-05	-67	16-Jan-07	452	519
Biharamulo	8	18-Nov-05	13-Sep-05	-66	13-Nov-06	360	426
Simanjiro	4	19-Dec-05	27-Sep-05	-83	18-Nov-06	334	417
Mbulu	6	13-Jan-06	19-Sep-05	-116	09-Nov-06	300	416

[1] ʻRefers to the number of days that the TNVS had been operating in each district prior to the each census. Negative values indicate that the first census took place before the official launch.

Measuring ITN (net kit) availability

The census is primarily interested in the extent to which the TNVS might be expected to influence ITN availability and the market for ITNs. One approach to measuring ITN availability is simply to take the number of outlets stocking ITNs as a proportion of the total number of outlets. However, this measure is sensitive to changes in the denominator due to, for example, outlets opening and closing in an area. A better measure of availability is whether there is at least one outlet in a ward selling ITN products. In most cases, there is at least one antenatal clinic per ward providing discount vouchers to pregnant women. Therefore, the presence of at least one outlet in that ward stocking ITNs and accepting vouchers makes it easier for a voucher recipient to buy an ITN and this measure is less sensitive to changes in the number of outlets in an area. Data on both measures are presented in this report.

Results

Table 2 provides summary data for the outlets included in the retail census. In 2006/7 a total of 2,367 outlets were surveyed, the majority being general shops (81.5%) followed by *Duka La Dawa* or drug shops (11.4%), kiosks (6%), *Machinga* or travelling markets (0.4%), pharmacies (0.3%) and supermarkets (0.04%). Table 2 also shows the proportion of each outlet type stocking net kits. Twenty per cent of outlets were found to be stocking ITNs, similar to the previous round. Within this, the proportion of general shops stocking ITNs increased slightly from 19% to 23%. Table 3 shows the proportion of outlets accepting TNVS vouchers. Overall about 5% of outlets surveyed were accepting vouchers in both survey rounds.

Table 2: Outlet types and shops stocking ITNs - All districts

	Total outlets surveyed (% of total outlets)				No. outlet type stocking net kits (% of each outlet type)			
	2005		2006/7		2005		2006/7	
Machinga	19	0.80%	9	0.38%	4	0.2%	4	44.4%
Kiosks	150	6.50%	143	6.04%	23	1.0%	23	16.1%
General shops	1854	81.30%	1,926	81.40%	434	19.0%	434	22.5%
Supermarkets	6	0.30%	1	0.04%	0	0.0%	0	0.0%
Pharmacies	8	0.40%	6	0.25%	1	0.0%	1	16.7%

	Total outlets surveyed (% of total outlets)				No. outlet type stocking net kits (% of each outlet type)			
	2005		**2006/7**		**2005**		**2006/7**	
Drug shops	241	10.60%	269	11.37%	9	0.4%	9	3.3%
Other	4	0.20%	10	0.42%	2	0.1%	2	20.0%
Total	2282	100%	2364	100%	473	20.7%	473	20.0%

Table 3: Percentage of shops accepting vouchers - All districts

	2005			**2006/7**		
	Total*	**Accept voucher**	**%**	**Total***	**Accept voucher**	**%**
Machinga	11	0	0.0%	9	0	0.0%
Kiosks	63	1	1.6%	119	2	1.7%
General shops	845	38	4.5%	1,638	75	4.6%
Supermarkets	2	0	0.0%	1	0	0.0%
Pharmacies	8	1	12.5%	6	1	16.7%
Drug shops	144	9	6.3%	255	26	10.2%
Other	2	0	0.0%	8	2	25.0%
Total	1,075	49	5%	2,037	106	5.2%

*Excludes missing

Availability at ward level

The best measure of availability is the proportion of wards with at least one outlet stocking ITNs. The tables below shows that the proportion of wards with at least one outlet stocking ITNs increased from 79% in 2005 to 91% in 2006/7 (p=0.06) in major trading centres. In non major trading centres the proportion nearly doubled, from 35% to 65% (p<0.001). Ngao availability appears to have fallen back slightly: 92% to 83% (p=0.127) in major trading centres and from 64% to 60% (p=0.669) in non major trading centres.

Table 4: Wards with at least one outlet stocking net kits by trading centre type

	2005			**2006/7**			**P***
	Total number of wards	No. wards with at least one outlet stocking net kits	%	Total number of wards	No. wards with at least one outlet stocking net kits	%	
MTCs	71	56	79%	64	58	91%	0.06
NMTCs	72	25	35%	63	41	65%	<0.001
Total	142	80	56%	127	99	78%	<0.001

*Pearson chi square test for differences between rounds

Table 5: Wards with at least one outlet stocking Ngao by trading centre type

	2005			2006/7			P*
	Total number of wards	No. wards with at least one outlet stocking Ngao (%)	%	Total number of wards	No. wards with at least one outlet stocking Ngao	%	
MTCs	71	65	92%	64	53	83%	0.127
NMTCs	72	46	64%	63	38	60%	0.669
Total	142	111	78%	127	91	72%	<0.001

*Pearson chi square test for differences between rounds

Table 6 shows that the number of districts where every ward had at least one outlet stocking net kits increased from 3 to 7 in the latest round. All remaining districts contained at least some wards where there was at least one outlet stocking net kits.

Table 6: Wards with at least one outlet stocking netkits, by district

	2005			2006/7		
	No. of wards surveyed	**No of wards with at least one outlet stocking ITNs**	**%**	**No. of wards surveyed**	**No of wards with at least one outlet stocking ITNs**	**%**
BAGAMOYO	4	4	100%	4	4	100%
BIHARAMULO	8	6	75%	6	6	100%
BUNDA	6	5	83%	6	6	100%
DODOMA RURAL	14	7	50%	4	2	50%
IGUNGA	8	3	38%	8	7	88%
KARATU	4	2	50%	4	3	75%
KIBONDO	6	1	17%	3	3	100%
KILOMBERO	6	5	83%	6	4	67%
LUDEWA	6	0	0%	6	1	17%
MAGU	8	4	50%	8	8	100%
MBULU	8	5	63%	6	5	83%
MEATU	8	2	25%	6	5	83%
NACHINGWEA	8	3	38%	8	3	38%
RUFIJI	6	3	50%	6	3	50%
SAME	8	5	63%	8	7	88%
SIMANJIRO	4	2	50%	4	2	50%
SINGIDA	4	2	50%	4	3	75%
SUMBAWANGA RURAL	8	1	13%	8	5	63%
TABORA RURAL	6	6	100%	6	6	100%
TANDAHIMBA	8	7	88%	8	8	100%
TANGA	8	6	75%	8	6	75%

ITN and Ngao availability

Tables 7 and 8 summarise percentage availability of net kits, long lasting nets and Ngao by trading centre type. This indicator is sensitive to changes in the both the denominator and numerator. The latest round shows that the proportion of outlets stocking net kits is higher in major trading centres than non major trading centres (22%, 17% respectively). Very few outlets were stocking long lasting nets at the time of both surveys. In contrast to net kits, the proportion of outlets accepting vouchers was higher among outlets in non major trading centres than major trading centres (9%, 4% respectively).

Table 7: Net kits and Ngao availability and voucher acceptance - Major Trading Centres

	2005			2006/7			P*
	Total	**No.**	**%**	**Total**	**No.**	**%**	
Outlets stocking Net kits	1855	427	23%	1862	417	22%	0.629
Outlets stocking Ngao	1855	550	30%	1862	441	24%	<0.001
Outlets stocking other insecticide	-	-	-	1862	17	1%	
Outlets stocking long lasting nets	1844	4	0.2%	1865	12	1%	0.046
Outlets accepting vouchers	876	32	4%	1598	65	4%	0.644

*Pearson chi square test for differences between rounds

Table 8: Net kits and Ngao availability and voucher acceptance – Non Major Trading Centres

	2005			2006/7			P*
	Total	**No.**	**%**	**Total**	**No.**		
Outlets stocking Net kits	428	46	11%	525	90	17%	0.05
Outlets stocking Ngao	428	106	25%	525	110	21%	0.162
Outlets stocking other insecticide	-	-	-	525	6	1%	
Outlets stocking long lasting nets	427	1	0.2%	525	2	0.4%	0.691
Outlets accepting vouchers	200	17	9%	450	41	9%	0.815

*Pearson chi square test for differences between rounds

Tables 9 and 10 show net kit availability by district disaggregated by major and non-major trading centres.

Table 9:Net kit availability by district - Major trading centres

	2005			2006/7		
	Total	**No**	**%**	**Total**	**No.**	**%**
BAGAMOYO	74	23	31%	70	28	40%
BIHARAMULO	67	19	28%	117	34	29%
BUNDA	72	29	40%	106	34	32%
DODOMA RURAL	75	9	12%	23	4	17%
IGUNGA	92	19	21%	132	26	20%
KARATU	98	29	30%	22	4	18%
KIBONDO	113	10	9%	116	14	12%
KILOMBERO	98	50	51%	90	42	47%

	2005			2006/7		
	Total	**No**	**%**	**Total**	**No.**	**%**
LUDEWA	24	0	0%	33	3	9%
MAGU	69	18	26%	128	33	26%
MBULU	101	26	26%	96	23	24%
MEATU	88	10	11%	122	25	20%
NACHINGWEA	66	24	36%	60	14	23%
RUFIJI	55	5	9%	55	6	11%
SAME	131	33	25%	128	31	24%
SIMANJIRO	105	10	10%	100	14	14%
SINGIDA	144	41	28%	142	39	27%
SUMBAWANGA RURAL	21	4	19%	21	2	10%
TABORA RURAL	56	9	16%	35	5	14%
TANDAHIMBA	62	26	42%	49	11	22%
TANGA	244	33	14%	217	25	12%
Total	**1,855**	**427**	**23%**	**1,862**	**417**	**22%**

Table 10: Net kit availability by district - Non - major trading centres

	2005			2006/7		
	Total	**No**	**%**	**Total**	**No.**	**%**
BAGAMOYO	31	4	13%	25	3	12%
BIHARAMULO	22	5	23%	18	2	11%
BUNDA	24	4	17%	28	5	18%
DODOMA RURAL	23	2	9%	8	0	0%
IGUNGA	23	0	0%	41	5	12%
KARATU	16	0	0%	91	23	25%
KIBONDO	15	0	0%	11	2	18%
KILOMBERO	23	3	13%	21	2	10%
LUDEWA	7	0	0%	10	4	40%
MAGU	16	2	13%	25	4	16%
MBULU	22	2	9%	20	2	10%
MEATU	16	0	0%	20	4	20%
NACHINGWEA	15	1	7%	16	1	6%
RUFIJI	10	1	10%	12	0	0%
SAME	44	4	9%	44	3	7%
SIMANJIRO	20	0	0%	17	0	0%
SINGIDA	12	0	0%	12	1	8%
SUMBAWANGA RURAL	15	0	0%	23	3	13%
TABORA RURAL	27	7	26%	43	14	33%
TANDAHIMBA	20	6	30%	16	6	38%
TANGA	27	5	19%	24	6	25%
Total	**428**	**46**	**11%**	**525**	**90**	**17%**

Tables 11 and 12 show Ngao availability by district, distinguished by major and non-major trading centre.

Table 11:Ngao availability by district – Major trading centres

	2005			2006/7		
	Total	**No**	**%**	**Total**	**No.**	**%**
BAGAMOYO	74	20	27%	70	28	40%
BIHARAMULO	67	17	25%	117	12	10%
BUNDA	72	22	31%	106	21	20%
DODOMA RURAL	74	39	53%	23	18	78%
IGUNGA	92	35	38%	132	10	8%
KARATU	98	15	15%	22	1	5%
KIBONDO	113	11	10%	116	4	3%
KILOMBERO	99	20	20%	90	26	29%
LUDEWA	24	1	4%	33	2	6%
MAGU	69	33	48%	128	22	17%
MBULU	101	15	15%	96	19	20%
MEATU	88	22	25%	122	4	3%
NACHINGWEA	66	11	17%	60	9	15%
RUFIJI	55	24	44%	55	25	45%
SAME	131	49	37%	128	46	36%
SIMANJIRO	105	42	40%	100	41	41%
SINGIDA	144	49	34%	142	40	28%
SUMBAWANGA RURAL	21	3	14%	21	1	5%
TABORA RURAL	56	22	39%	35	14	40%
TANDAHIMBA	62	14	23%	49	18	37%
TANGA	244	86	35%	217	80	37%
Total	1,855	550	30%	1,862	441	24%

Table 12: Ngao availability – Non major trading centres

	2005			2006/7		
	Total	**No.**	**%**	**Total**	**No.**	**%**
BAGAMOYO	31	5	16%	25	6	24%
BIHARAMULO	22	8	36%	18	1	6%
BUNDA	24	10	42%	28	7	25%
DODOMA RURAL	23	7	30%	8	3	38%
IGUNGA	23	4	17%	41	1	2%
KARATU	16	1	6%	91	9	10%
KIBONDO	15	0	0%	11	0	0%
KILOMBERO	23	6	26%	21	11	52%
LUDEWA	7	2	29%	10	4	40%
MAGU	16	11	69%	25	2	8%
MBULU	22	1	5%	20	2	10%
MEATU	16	0	0%	20	1	5%
NACHINGWEA	15	2	13%	16	4	25%
RUFIJI	10	2	20%	12	1	8%
SAME	44	8	18%	44	8	18%
SIMANJIRO	20	10	50%	17	8	47%
SINGIDA	12	2	17%	12	2	17%
SUMBAWANGA RURAL	15	2	13%	23	1	4%
TABORA RURAL	27	8	30%	43	23	53%

	2005			2006/7		
	Total	**No.**	**%**	**Total**	**No.**	**%**
TANDAHIMBA	20	5	25%	16	5	31%
TANGA	27	12	44%	24	11	46%
Total	428	106	25%	525	110	21%

Coverage rates and ITN availability

Using data from the 2006 household survey Figures 1 and 2 shows the positive relationship between 2006/7 ITN availability and coverage rates at the district level for under fives and any net. While it is not possible using these data to determine causality, the figures suggest that an increase in ITN availability in outlets is associated with an increase in under-five net and ITN coverage rates at the district level. Further analysis is needed to unpack this relationship and determine to what extent it reflects other factors such as socio-economic influences.

Figure 1: Relationship between ITN availability and coverage at the district level (<5s), 2006

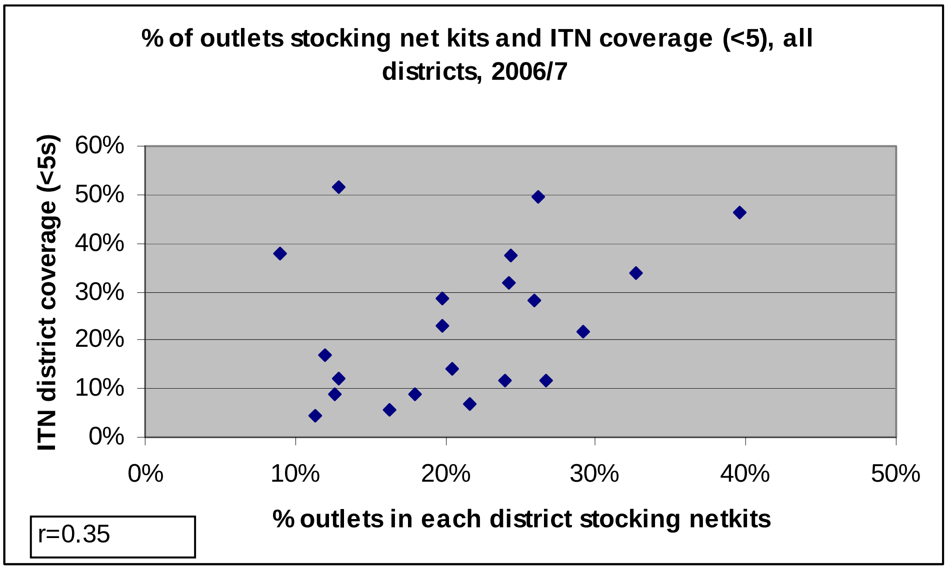
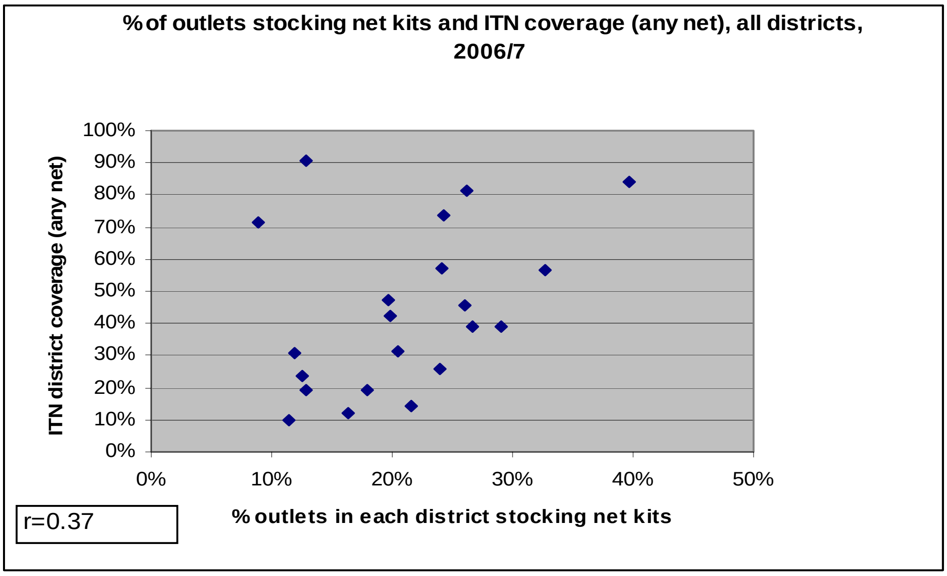


Figure 2: Relationship between ITN availability and coverage at the district level, any net, 2006



Time in ITN business

The survey asks respondents for how long they had been stocking ITNs. Figure 3 shows that in major trading centres the proportion of outlets who have been in business for less than 12 months fell back slightly from 20% in 2005 to 17% in 2006/7. The respective figures for non major trading centres (Figure 4) are 36% to 21%.

Figure 3: Time in ITN business – Major trading centres

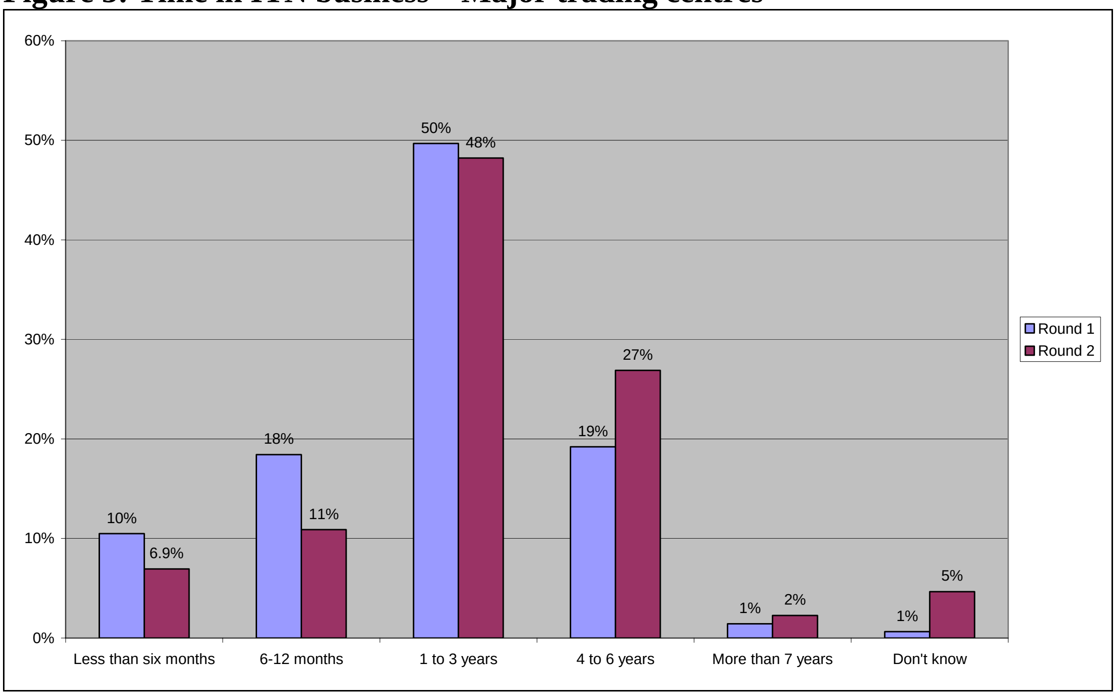
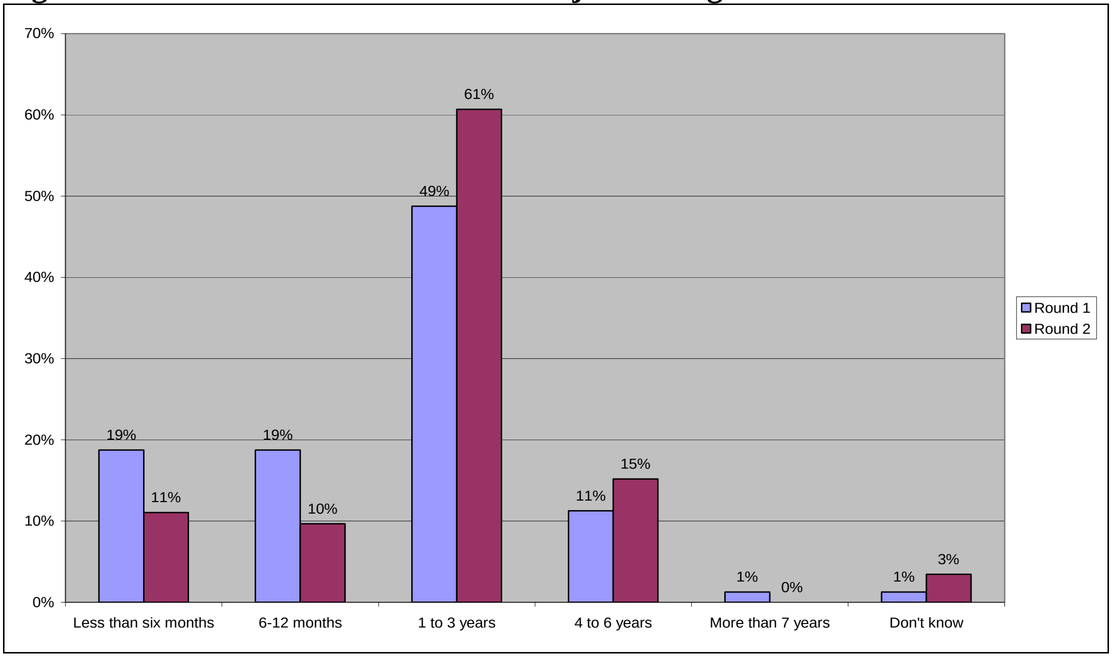


Figure 4: Time in ITN business – Non Major trading centres



TNVS awareness and voucher acceptance

Table 13 shows that the proportion of outlets aware of the scheme rose substantially from 47% to 86% in both major and non major trading centres. A district breakdown is provided in Tables 14 and 15. Awareness of the scheme is likely to be related to the number of outlets accepting vouchers, the selection of which is determined by the by the Logistics Contractor MEDA. Ideally there is at least one retailer per RCH clinic, although there can be more retailers if necessary.

Table 13: Voucher awareness - summary

	2005			**2006/7**			**P***
	No. surveyed	No. Aware of TNVS	%	No. surveyed	No. Aware of TNVS	%	
Major trading centres	1,851	871	47%	1,861	1,599	86%	<0.001
Non major trading centres	427	200	47%	523	450	86%	<0.001

*Pearson chi square test for differences between rounds

Table 14: Voucher awareness by district – Major trading centres

	2005			**2006/7**		
	No. surveyed	No. Aware	%	No. surveyed	No. Aware	%
BAGAMOYO	74	60	81%	70	67	96%
BIHARAMULO	67	18	27%	117	104	89%
BUNDA	72	20	28%	106	99	93%
DODOMA RURAL	75	62	83%	23	14	61%
IGUNGA	92	39	42%	132	117	89%
KARATU	98	43	44%	22	21	95%
KIBONDO	113	34	30%	116	107	92%
KILOMBERO	97	77	79%	90	79	88%
LUDEWA	24	6	25%	33	31	94%

	2005			2006/7		
	No. surveyed	No. Aware	%	No. surveyed	No. Aware	%
MAGU	68	15	22%	128	110	86%
MBULU	102	26	25%	96	82	85%
MEATU	88	30	34%	122	111	91%
NACHINGWEA	66	51	77%	60	47	78%
RUFIJI	54	22	41%	55	44	80%
SAME	131	46	35%	131	117	89%
SIMANJIRO	105	61	58%	98	88	90%
SINGIDA	144	71	49%	142	124	87%
SUMBAWANGA RURAL	19	6	32%	21	17	81%
TABORA RURAL	57	34	60%	34	25	74%
TANDAHIMBA	62	44	71%	48	35	73%
TANGA	243	106	44%	217	160	74%
Total	**1,851**	**871**	**47%**	**1,861**	**1,599**	**86%**

Table 15: Voucher awareness by district – Non major trading centres

	2005			**2006/7**		
District	**No surveyed**	**No.**	**%**	**No surveyed**	**No.**	**%**
BAGAMOYO	31	25	81%	25	20	80%
BIHARAMULO	22	3	14%	18	14	78%
BUNDA	23	6	26%	28	21	75%
DODOMA RURAL	24	15	63%	8	6	75%
IGUNGA	23	6	26%	41	36	88%
KARATU	15	7	47%	90	82	91%
KIBONDO	15	3	20%	11	11	100%
KILOMBERO	23	15	65%	21	19	90%
LUDEWA	7	2	29%	10	10	100%
MAGU	16	6	38%	25	23	92%
MBULU	22	4	18%	20	15	75%
MEATU	16	3	19%	20	17	85%
NACHINGWEA	15	10	67%	16	10	63%
RUFIJI	10	5	50%	12	11	92%
SAME	44	20	45%	43	40	93%
SIMANJIRO	20	17	85%	17	16	94%
SINGIDA	12	4	33%	12	11	92%
SUMBAWANGA RURAL	15	1	7%	23	19	83%
TABORA RURAL	27	17	63%	43	38	88%
TANDAHIMBA	20	15	75%	16	9	56%
TANGA	27	16	59%	24	22	92%
Total	**427**	**200**	**47%**	**523**	**450**	**86%**

Table 16 shows that the proportion of outlets accepting vouchers is higher in non major trading centres (9%) than major trading centres (4%). There was no change between the two survey rounds. Tables 17 and 18 show the percentage of outlets accepting vouchers by district.

Table 16: Voucher acceptance – major and non major trading centres

	2005			2006/7			P*
	No. surveyed	No.	%	No. surveyed	No.	%	
Major trading centres	876	32	4%	1,598	65	4%	0.644
Non major trading centres	200	17	9%	450	41	9%	0.815

*Pearson chi square test for differences between rounds

Table 17: Voucher acceptance by district – major trading centre

	2005			2006/7		
	No. surveyed	No.	%	No. surveyed	No.	%
BAGAMOYO	60	2	3%	67	2	3%
BIHARAMULO	18	2	11%	104	3	3%
BUNDA	20	0	0%	99	5	5%
DODOMA RURAL	61	6	10%	14	1	7%
IGUNGA	39	0	0%	117	4	3%
KARATU	43	1	2%	21	1	5%
KIBONDO	34	0	0%	107	3	3%
KILOMBERO	82	3	4%	79	2	3%
LUDEWA	5	0	0%	31	3	10%
MAGU	15	1	7%	110	6	5%
MBULU	26	0	0%	82	2	2%
MEATU	30	1	3%	111	6	5%
NACHINGWEA	52	4	8%	47	2	4%
RUFIJI	22	2	9%	44	2	5%
SAME	46	4	9%	117	6	5%
SIMANJIRO	61	0	0%	88	1	1%
SINGIDA	72	1	1%	124	2	2%
SUMBAWANGA RURAL	5	0	0%	17	3	18%
TABORA RURAL	34	1	3%	25	2	8%
TANDAHIMBA	44	1	2%	34	5	15%
TANGA	107	3	3%	160	4	3%
Total	876	32	4%	1,598	65	4%

Table 18: Voucher acceptance by district – Non major trading centre

	2005			2006/7		
	No. surveyed	No.	%	No. surveyed	No.	%
BAGAMOYO	25	2	8%	20	2	10%
BIHARAMULO	3	0	0%	14	0	0%
BUNDA	5	0	0%	21	3	14%
DODOMA RURAL	15	2	13%	6	0	0%
IGUNGA	6	0	0%	36	2	6%
KARATU	7	0	0%	82	2	2%
KIBONDO	3	0	0%	11	1	9%
KILOMBERO	16	1	6%	19	1	5%
LUDEWA	1	0	0%	10	3	30%
MAGU	6	0	0%	23	4	17%
MBULU	4	0	0%	15	0	0%

	2005			2006/7		
	No. surveyed	No.	%	No. surveyed	No.	%
MEATU	3	0	0%	17	4	24%
NACHINGWEA	10	1	10%	10	1	10%
RUFIJI	5	1	20%	11	1	9%
SAME	22	2	9%	40	3	8%
SIMANJIRO	17	0	0%	16	1	6%
SINGIDA	4	1	25%	11	1	9%
SUMBAWANGA RURAL				19	3	16%
TABORA RURAL	18	3	17%	38	4	11%
TANDAHIMBA	14	0	0%	9	2	22%
TANGA	16	4	25%	22	3	14%
Total	200	17	9%	450	41	9%

TNVS acceptance and satisfaction amongst ITN sellers

Of outlets which were accepting vouchers, the vast majority (more than 80%) in both survey rounds reported that they were satisfied with the redemption process. Of those outlets not accepting vouchers, 66% expressed a willingness to be involved in the voucher scheme in the future.

Table 19: Satisfaction with the voucher scheme - Major trading centres

	2005			2006/7			P*
	No. surveyed	No.	%	No. surveyed	No.	%	
Accepting vouchers	876	32	4%	1,598	65	4%	0.644
Number satisfied	19	17	89%	65	54	83%	0.175
Accepted vouchers prior to launch	840	9	1%	1,532	16	1%	0.919
Willingness to accept vouchers	825	543	66%	1,521	1009	66%	0.215

*Pearson chi square test for differences between rounds

Table 20: Satisfaction with the voucher scheme – Non major trading centres

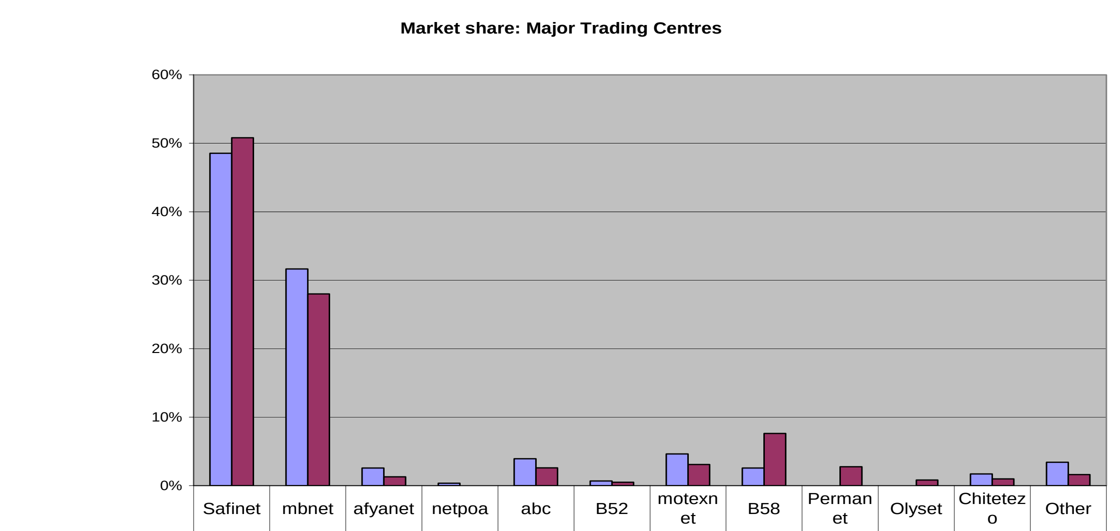
	2005			2006/7			P*
	No. surveyed	No.	%	No. surveyed	No.	%	
Accepting vouchers	200	17	9%	450	41	9%	0.815
Number satisfied	14	13	93%	40	35	88%	0.229
Accepted vouchers prior to launch	179	1	1%	408	5	1%	0.466
Willingness to accept vouchers	178	117	66%	406	270	67%	0.549

*Pearson chi square test for differences between rounds

Market share

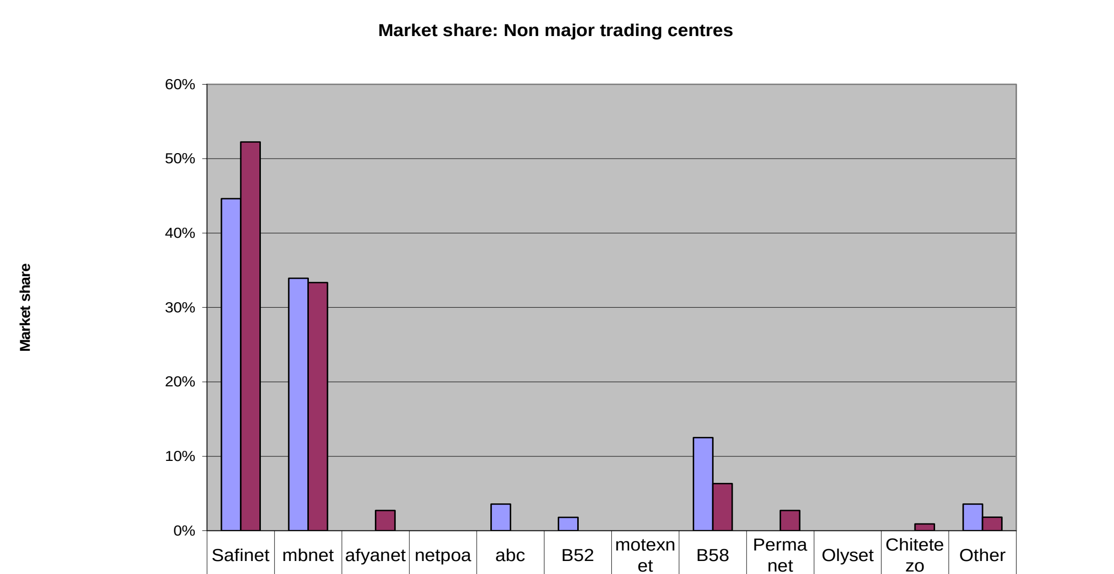
The survey asked respondents to state the brands of nets they stock. Figures 5 and 6 summarises the market share across outlets in major and non major trading centres. Safi net continues to dominate the market with more than 50% of outlets stocking these nets, followed by Mbu net. Other brands of nets included Chitetezo from Malawi, Chinese nets, Supernet, Zuia mbu and ABC from Uganda. The second survey round saw the appearance of brands of long lasting nets – Olyset and Permanet. However the relative share is still small at less than 3%.

Figure 5: Market share by brand – Major trading centres



	Safinet	mbnet	afyanet	netpoa	abc	B52	motexnet	B58	Permanet	Olyset	Chitetezo	Other
Round 1 (n=585)	49%	32%	3%	0.3%	4%	1%	5%	3%	0%	0%	2%	3%
Round 2 (n= 618)	51%	28%	1%	0%	3%	0%	3%	8%	3%	1%	1%	2%

Figure 6: Market share – Non major trading centres



	Safinet	mbnet	afyanet	netpoa	abc	B52	motexnet	B58	Permanet	Olyset	Chitetezo	Other
Round 1 (n= 56)	45%	34%	0%	0%	4%	2%	0%	13%	0%	0%	0%	4%
Round 2 (n=111)	52%	33%	3%	0%	0%	0%	0%	6%	3%	0%	1%	2%

Display of point of sales materials

Very few outlets were displaying any point of sales materials (i.e. stickers/posters) for nets at the time of the census (3.4%). However, point of sales of materials for insecticides were more widely available (11.7%) compared with nets. Of those 49 outlets accepting vouchers the majority (71.4%) were displaying point of sales material for vouchers.

Table 21: **Display of point of sales materials - Major trading centres**

	2005			2006/7			P
	Yes	%	Total	Yes	%	Total	
Point of sales nets	65	4%	1855	79	4%	1847	0.224
Point of sales insecticides	239	13%	1854	242	13%	1847	0.848
Point of sales vouchers	26	1%	1855	59	3%	1847	<0.001

*Pearson chi square test for differences between rounds

Table 22: Display of point of sales materials – Non major trading centres

	2005			2006/7			P
	Yes	%	Total	Yes	%	Total	
Point of sales nets	12	3%	429	23	4%	523	0.192
Point of sales insecticides	29	7%	429	41	8%	524	0.531
Point of sales vouchers	20	5%	428	35	7%	524	0.187

*Pearson chi square test for differences between rounds

Net prices

An important component of the retail census is to monitor changes in price since the introduction of the scheme. The survey asks respondents to record the wholesale price, retail price and voucher 'top-up' prices (the amount which needs to be paid on top of the Tsh 2750 voucher) for different sized and shaped nets. The table below shows the average wholesale, retail and top-up prices for all outlets stocking selected ITNs.[2] Data were collected on the cheapest and most expensive brand for each size of net. For ease of presentation only the cheaper brands are presented here. Data are combined for major and non major trading centres due to small sample sizes.

[2] Although data were collected on prices of round and square nets, data here are presented for round nets only due to very small sample sizes for square nets.

Table 23: Mean wholesale, retail and top up prices

	2005				2006/7			
	N	Mean price (Tsh)	95% confidence interval		N	Mean price (Tsh)	95% confidence interval	
3x6 round								
Wholesale price	222	2516	2448	2584	175	2808	2726	2889
Retail price	281	3079	3008	3150	229	3299	3231	3368
Top up price	14	566	386	746	35	983	793	1173
4 x 6 round								
Wholesale price	24	2596	2380	2811	25	2972	2711	3233
Retail price	33	3239	3002	3477	39	3612	3447	3776
Top up price	1	750	-	-	3	1033	0	2153
6 x 6 round								
Wholesale price	124	2823	2703	2943	112	3163	3054	3271
Retail price	157	3512	3373	3651	147	3793	3670	3917
Top up price	6	792	43	1540	20	1175	1004	1346

A key question is the extent to which retailers charge different prices to those purchasing nets with a voucher. We compared the effective total price (voucher plus top-up) with the retail price in those outlets accepting vouchers. While the voucher plus top up price for 3x6 and 4x6 nets are slightly higher than the retail price, none of the differences are significant (indicated by the overlapping 95% confidence intervals). There is therefore little evidence to suggest that retailers are over charging for nets paid with a voucher. Indeed voucher prices appear to be lower than the stated retail price for the larger 6x6 nets, suggesting retailers are discounting the larger nets to encourage purchase by voucher holders. However, again the difference is not statistically significant in either survey year.

Table 24: Top up vs. retail prices in those outlets accepting vouchers

	2005				2006/7			
	N	Mean (Tsh)	95% confidence interval		N	Mean (Tsh)	95% confidence interval	
3x6 round								
Total price with voucher	14	3316	3136	3496	35	3733	3543	3923
Reported retail price	14	3225	3042	3408	31	3610	3394	3825
4x6 round								
Total price with voucher	1	3500	-	-	3	3783	2663	4903
Reported retail price	1	3000	-	-	3	3533	2413	4653
6x6 round								
Total price with voucher	6	3542	2793	4290	20	3925	3754	4096
Reported retail price	6	3583	2743	4424	18	3961	3737	4185

It is useful to compare the results from the retail census for ITN and top up voucher prices with those reported in the household survey. Table 25 suggests that the top-up prices reported by retailers are consistently lower than those reported by household survey respondents.

Table 25: Comparison between price results from retail and household surveys

	Household survey (currently pregnant) 2006		**Retail audit 2006/7**			
Net size	**N**	**Mean Top up**	**N**	**Mean Top up**	**95% CI**	
3.5x6	29	1018	35	983	793	1173
4x6	101	1153	3	1033	0	2153
6x6	91	1390	20	1175	1004	1346

Field observations

Whilst undertaking the retail census, research workers are asked to report their own findings from the field. It is important to appreciate that these observations are **not** necessarily representative of the TNVS more generally. Rather, they provide a feel for some of the issues facing the implementation of the programme on the ground which may require further investigation.

During the first round it was reported that some designated outlets were not selling ITNs to non-voucher customers. Respondents reported to have been instructed to sell to voucher customers only. It was not clear whether they were told so or if it was a misunderstanding from the training. We reported that this works against ITN private market development as other customers may believe that private shops sell ITNs to voucher recipients only. This is more serious for wards with only one outlet selling ITNs and accepting vouchers because people have no other choice of outlet. When the program ends it may be difficult for designated outlets to continue sell ITNs. There were also anecdotal reports of top-up price fixing in some wards. Pregnant women, upon receiving vouchers, are instructed to go to a specified designated outlet and pay a fixed amount as a top up price. This deprives voucher recipients of bargaining power. Some designated outlets were reported to be selling one particular medium net size to voucher customers. They reasoned that most voucher customers are able to top-up for at most medium size nets as against large size nets. However, this deprives the customers of freedom of choosing their preferences. Again, this is more critical in wards with only one outlet stocking and accepting vouchers and selling only to voucher customers.

During the second round field workers continued to report that most retail shop owners are interested in participating in the voucher scheme but were unclear about the process of selection of retail agents. Some respondents selling nets complained about the frequency of price changes for locally manufactured nets. This meant they were forced to sell imported nets which are available at a lower price. However these nets (Chitetezo from Malawi was mentioned by several respondents) are not considered to be of a high quality. There is also an issue with the reported size of nets not being the same as the actual net inside the bag. This has led to complaints from customers and loss in business.

There are still cases of ngao being removed from net kits. This seems to be a persistent problem for bundled nets and it is not clear at what stage the ngao is removed. Some voucher agents also complained about the transport costs of collecting the nets and suggested that a better system would involve nets being delivered direct to the agent. Others argued that the redemption process is still relatively complicated with some retailers having to travel long distances to redeem vouchers.

Our survey showed that prices over time have generally risen for all nets, however retailers said that pregnant women are not ready to increase the top-up amount squeezing profit margins. Respondents in Sumbawanga in particular argued that more community sensitisation is required.

Conclusions

An encouraging finding from the second round of census is that the proportion of wards with at least one ward stocking net kits in major trading centres has increased from 79% to 91%. We found that general shops are the most likely type of outlet type to stock nets and accept vouchers and nearly one third of outlets stocking ITNs had come into the market within the last 12 months. A second encouraging finding is that there continues to be no evidence that outlets are over-charging voucher holders for voucher nets. Finally, awareness of the voucher scheme has increased from under 50% to over 86% in both MTCs and NMTCs. Of those currently accepting vouchers the vast majority (over 90%) were satisfied with the redemption process. Of those outlets not currently accepting vouchers, most (65%) expressed a willingness to do so in the future. However retailers are not aware of the selection criteria for selecting voucher agents. As awareness of the scheme continues to grow this is likely to become more of an issue for retailers not included in the scheme.

Appendix 1: Methodology

Major and non major trading centres

In order to measure availability it is important to establish whether products are available in what is defined as "trading centres", since if they are not available here they are highly unlikely to be available outside of these areas and investigating this would be a waste of resources. The sample (n) was divided for each district into (n/2) considered as "Major Trading Centres" (MTC) and (n/2) wards, which were considered as "Non-Major Trading centres" (NMTC) (both rounded to nearest whole number). In order to determine whether wards were MTC or NMCT, wards were ranked in decreasing order of size depending on the number of outlets/businesses in each ward. This was done by obtaining data from the *Ofisi ya Biashara* (District level Business Office) records on the number of registered businesses by ward. Wards were then ranked by the number of outlets. The largest n/2 MTCs were then automatically selected to obtain volumes and a picture of availability in MTCs. Another n/2 NMTC wards were randomly sampled from the remaining wards within a district to obtain a picture of volumes and availability in NMTCs. Confirmation that the selected districts were the major trading centres in the ward was obtained by discussion with key informants such as the Business Officer, District Medical Officer and other people knowledgeable of the district (e.g. local businesspeople). This confirmation was necessary since the list of registered businesses may not be fully accurate or up to date.

In order to explain how we defined and delineated the trading centre within the town or village it is useful to consider the MTC wards separately from the NMTC (generally much smaller) wards. When visiting the NMTC wards it was fairly easy to distinguish between areas used for business and residential purposes and those used for residential and agricultural or farming purposes. This is because usually the trading area is clustered around a market area or square, generally the number of outlets is very small and residents and shopkeepers are able to provide the number and location of all shops in the village. In the MTC wards, the delineation of where the trading centre ended was slightly more difficult, however it was still possible to identify and visit the vast majority of outlets by simply travelling on foot around the town/village and systematically going down every street. We also asked members of the public whether there were any shops on certain streets or tracks. Working in this way we were able to visit a sufficiently high proportion of outlets to be confident that our estimates of availability are reliable.

Another issue which had to be resolved in the field was to develop working definitions of which businesses were to be included and which should be excluded from the data collection. The definition had to be sufficient to prevent wasting time and resources in visiting outlets which are extremely unlikely to carry ITN products, while at the same time it had to allow for the wide range of possible outlets to be included in data collection activities. Table A summarises the working definitions of those outlets that are to be included and excluded from the survey.

Table A: Outlet inclusion and exclusion criteria

Outlets Included in Census	Outlets Excluded from Census
PRIMARY CRITERIA	
Shops selling more than one product line	Shops selling only one product line which is not an ITN product (net, net kit, Ngao)
SECONDARY CRITERIA	
General and food stuffs	
General Duka's (shops) (including those on petrol station forecourts) Grocery shops Kiosks	Duka la Nyama (Butchers shops) Fruit stalls and Magenge (stalls with very limited low cost stock, e.g. vegetables, dried fish, tea bags) Bakery Bottle stores
Other products	
	Video stores Hardware stores Petrol pumps with no shop attached Car/bicycle spare shops
Textile products	
New textile and clothing shops Tailors also selling ready made clothing and/or kanga cloths	Second hand clothing stalls/shops (not allowed by law to sell new items) Tailors (service only, no ready made clothes or kanga available)
Medical and veterinary products	
Duka la dawa (medical store) Pharmacy Agricultural and veterinary product stores	
Service industries	
	Hairdressers/barbers, Milling machines, Blade sharpeners, Hotels, Restaurants, Cafes, Tea/Coffee shops, Shoe shine, Bars, Photocopying/secretarial services, Internet Cafes

Data collection

After selecting an outlet for inclusion in the survey, the interviewer briefly explained the purpose of the activity and obtained verbal consent for the interview. The questionnaire (see Appendix 2) was then filled out and any further questions of the respondent answered.

Appendix 2: List of wards selected within each district.

BAGAMOYO		**KARATU**		**MBULU**		**SIMANJIRO**	
CHALINZE	37	ENDAMARARIEK	11	BASHAY	11	MERERANI	75
DUNDA	37	KARATU	87	DONGOBESH	19	NGORIKA	13
MBWEWE	12	OLDEANI	10	GEHANDU	6	ORKESUMET	30
MIONO	19	RHOTIA	6	HAYDOM	31	SHAMBARAI	7
Total	105	Total		MBULU MJINI	52	Total	125
			114	SANU	5		
				Total	124		
BIHARAMULO		**KIBONDO**		**MEATU**		**SINGIDA**	
BIHARAMULO	35	BUNYAMBO	5	BUKUNDI	12	IPEMBE	110
BUKOME	5	KAKONKO	16	LUBIGA	5	MAJENGO	34
BUSERESERE	13	KIBONDO	81	MWAMISHALI	7	MANDEWA	5
BWANGA	4	KITAHANA	6	MWANDOYA	13	MTAMAA	7
CHATO	12	MABAMBA	16	MWANHUZI	63	Total	156
MUGANZA	8	MUGUNZU	4	NKOMA	4		
NYAMIREMBE	6			Total	104		
RUNAZI	7	Total	128				
Total	90						
BUNDA		**KILOMBERO**		**NACHINGWEA**		**SUMBAWANGA RURAL**	
BUNDA	38	IFAKARA	62	KILIMANIHEWA	5	KAENGESA	3
KIBARA	18	KIBEREGE	7	MNERO MREME	3	KALAMBANZITE	4
KUNZUGU	10	LUMEMO	11	NAIPANGA	9	LAELA	7
MIHINGO	4	MANG'ULA	20	NAMBAMBO	48	LUSAKA	4
NAMHULA	10	MCHOMBE	17	NANGOWE	3	MATAI	6
NYAMUSWA	16	SANJE	5	NDOMONI	1	MPUI	4
Total	96	Total	122	RUPONDA	7	MSANZI	4
				STESHENI	5	MWAZYE	4
				Total	81	Total	36
DODOMA RURAL		**LUDEWA**		**RUFIJI**		**TABORA RURAL**	
BAHI	11	LUANA	5	IKWIRIRI	17	BUKUMBI	18
CHILONWA	1	LUDENDE	2	KIBITI	29	GOWEKO	26
DABALO	11	LUDEWA	13	KIONGORONI	2	IGALULA	9
FUFU	4	MANDA	3	MAHEGE	3	ILOLANGULU	8
IRINGA MVUMI	2	MLANGALI	6	RUARUKE	9	LUTENDE	10
KIGWE	10	NKOMANG'OMBE	2	UMWE	22	MABAMA	13
LAMAITI	7	Total	31	Total	82		
MAKANDA	2					Total	84
MAKANGWA	7						
MANCHALI	10						
MPALANGA	2						
MPWAYUNGU	10						
MVUMI MISSIO	16						
NGHAMBAKU	6						
Total	99						
IGUNGA		**MAGU**		**SAME**		**TANDAHIMBA**	
CHOMA	13	KALEMELA	16	HEDARU	23	KITAMA	13
IGUNGA	48	KISESA	19	KIHURIO	11	LUAGALA	4
IGURUBI	11	KITONGOSIMA	5	MAKANYA	21	MAHUTA	15
MBUTU	3	MAGU MJINI	24	MPINJI	10	MAUNDO	11
NANGA	15	MKULA	5	MWEMBE	9	MICHENJELE	6
NGULU	4	MWAMABANZA	2	MYAMBA	14	MIHAMBWE	5
NKINGA	16	MWAMANYILI	10	NDUNGU	16	NAHNYANGA	5
ZIBA	5	NG'HANYA	4	SAME	71	TANDAHIMBA	23
Total	115	Total	85	Total	175	Total	82
TANGA							
CENTRAL	7						
CHUMBAGENI	20						
KIRARE	4						
MABOKWENI	8						
MAKORORA	24						
NGAMIANI KAT	135						
NGAMIANI KUS	65						
PONGWE	8						
Total	271						

Appendix 2: Data collection tool

TNVS: CENSUS OF OUTLETS

OUTLET CODE |__|__|__|__|__|__|__|

Module 1: Interview details

C1	Interviewer initials	|__|__
C2	Date of Interview (dd/mm/yyyy)	|__|__|/|__|__|/|__|__|__|__|
C3	District code	|__|__|
C4	Ward Name	
C5	Ward code	|__|__|__|__|
C6	Name of outlet	

Module 2: Respondent and outlet details

C7	Name of respondent	
C8	Name of shop owner (if different from above)	
C9	Are you the: 1 = Shop/kiosk owner 2 = Shop/kiosk assistant 3 = Machinga – self-employed 4 = Family member 5 = Other (*Specify*)	|__|__|
C10	Do you sell? 1= Retail only 2 = Wholesale only 3 = Wholesale and retail 99= Don't know	|__|__|

Module 3: Types of goods sold

C11 What goods are on sale in this outlet today?

INTERVIEWER: *Against each item write 1 = Yes, 2 = No or 9 = Don't know*

ITN Products and Drugs		**Food, Drink and Groceries**	
Nets (without insecticide)	[ ]	Fresh fruit and vegetables	[ ]
Net kits (net and Insecticide)	[ ]	Fresh meat	[ ]
Insecticides for treating nets (eg Ngao)	[ ]	Loose food by weight (e.g. maize flour, sugar, beans, dried fish)	[ ]
Anti-Malarial Drugs	[ ]	Pre-packaged foods (e.g. packet tea, canned foods, jars of jam)	[ ]
Drugs (other than anti-malarial drugs)	[ ]	Bottled drinks (e.g. sodas and beer)	[ ]
Mosquito coil	[ ]	Cleaning products (e.g. soap powder, washing soap)	[ ]
Insecticide sprays (eg Doom)	[ ]	Cosmetics Vipodozi	[ ]
Insect repellents	[ ]		

Clothing and Textiles		**Others**	
Ready made clothes	[ ]	General household goods (e.g. plasticware, bowls, pans, pots)	[ ]
Rolls of cloth	[ ]	Hardware (e.g. tools, cement, iron sheeting)	[ ]
Kanga	[ ]	Stationary (e.g. school books, pens, paper)	[ ]
Kitenge	[ ]	Watches, clocks, jewellery	[ ]
Bags or suit cases	[ ]	Radio	[ ]
Bedcovers, blankets or sheets	[ ]	Umbrella	[ ]
Mattresses	[ ]	Vehicle/bicycle	[ ]

		spare parts	
Sandals (flip flops)	[ ]		
Shoes (exclude flip flops)	[ ]		

Module 4: Net sales

C12	Do you normally sell unbundled mosquito nets? 1= Yes 2 = No 99 = Don’t know	|__|__|
C13	Do you normally sell mosquito nets packaged with insecticide? 1= Yes 2 = No 99 = Don’t know	|__|__|
C14	Do you normally sell long-lasting treated nets or Magic Power nets? (Chandarua chenye dawa ya kudumu au Nguvu za ajabu) 1= Yes 2 = No 99 = Don’t know	|__|__|
C15	Do you normally sell insecticide for treating mosquito nets 1 = Yes 2 = No 99 = Don’t know	|__|__|

INTERVIEWER: If the respondent answered **<u>NO</u>** or **<u>Don’t know</u>** to **ALL** of the above in Module 4, skip to Module 6.

C16	How long have you been in the business of selling unbundled nets? 1 = Less than 6 months, 2 = 6 to 12 months, 3 = 1 to 3 years 4 = 4 to 6 years 5 = More than 7 years 88 = Not applicable/ Don’t sell these items 99 = Don’t know	|__|__|
C17	How long have you been in the business of selling net kits? 1 = Less than 6 months, 2 = 6 to 12 months, 3 = 1 to 3 years 4 = 4 to 6 years 5 = More than 7 years 88 = Not applicable/Don’t sell these items 99 = Don’t know	|__|__|
C18	How long have you been in the business of selling long lasting treated nets or Magic Power nets? (Chandarua chenye dawa ya kudumu au Nguvu za ajabu) 1 = Less than 6 months 2 = 6 to 12 months 3 = 1 to 3 years 4 = 4 to 6 years 5 = More than 7 years 88 = Not applicable/Don’t sell these items 99 = Don’t know	|__|__|
C19	How long have you been in the business of selling insecticid**e**? 1 = Less than 6 months 2 = 6 to 12 months 3 = 1 to 3 years 4 = 4 to 6 years 5 = More than 7 years 88 = Not applicable/Don’t sell these items 99 = Don’t know	|__|__|
C20	When do you stock/sell nets? 1 = All year round 2 = Part of the year 3 = On request 4 = Other (specify) 88 = Not applicable/Don’t sell these items 99 = Don’t know	|__|__|
C21	Please give the NAME and LOCATION of the supplier of mosquito nets *Write ‘99’ if not known or ‘88’ if not applicable/don’t sell these items*	
C22	Does your net supplier deliver to your outlet? 1 = Yes 2 = No *88 = Not applicable/Don’t sell these items* 99 = Don’t know	|__|__|
C23	Give the NAME and LOCATION of your supplier of insecticide	

	Write 99 if not known or '88' if not applicable/don't sell these items	
C24	Does your insecticide supplier deliver to your outlet? 1 = Yes 2 = No *88 = Not applicable/Don't sell these items* 99 = Don't know	|__|__|

Module 5: ITN sales

C25 What brand of nets do you have in stock today? *Against each item write 1 = Yes, 2 = No or 9 = Don't know*

Nets brand	(Code: 1 = Yes, 2 = No, 9= Don't know)	**Nets brand**	(Code: 1 = Yes, 2 = No, 9= Don't know)
Safi nets	|__|	ABC	|__|
Mbu net	|__|	B52	|__|
Afya net	|__|	Motex	|__|
Net Poa	|__|	Other (please specify)	

INTERVIEWER: If answer is '2 = No' for all brands of net, skip to Module 7

C26 Please tell us more about the prices of **bundled net kits** (nets plus insecticide) you have in stock today

INTERVIEWER**:** Here we want you to record the lowest and highest price for each size of net listed below.
"Cost price" refers to the price paid by the shop owner to the wholesaler for each net.
"Retail price" refers to the price paid by a customer for a net without a voucher
"Voucher price" refers to the **top-up amount** which is paid by customers who buy a net with a voucher

Notes:

- Where there is only **one** price for a net size please write the **same** price in the Low and High boxes.
- Where a net size is **<u>not stocked</u>** please write '8888' in the Low and High boxes.
- If any price is **<u>not known</u>** write '9999'.
- **Do not** leave any boxes blank.

Size/shape	**Cost price (price at which net purchased)**		**Retail price**		**Voucher price (for net sold with voucher)**	
	Low	**High**	**Low**	**High**	**Low**	**High**
Round 3.5X6X7						
Round 4X6X7						
Round 6X6X7						
Square 3.5X6X7						
Square 4X6X7						
Square 6X6X7						

INTERVIEWER: Now go to Module 7

Module 6: Reasons for not selling ITN products (for outlets not currently selling nets)

C27	Have you ever sold mosquito nets (bundled or unbundled) in the past? 1 = Yes 2 = No 99 = Don’t know	|__|__| **If ‘No’ or ‘Don’t know’ skip to C29**
C28	Please give reason(s) why you stopped selling	**Now go to Module 7**
C29	Please give reason(s) why you have never sold these products.	

Module 7: Knowledge and involvement in the TNVS

C30	Have you heard of the voucher scheme for ITNs? 1 = Yes 2 = No 99 = Don't know	|__|__| **If 'No' or 'Don't know' skip to Module 9**
C31	Do you currently accept vouchers for ITNs 1 = Yes 2 = No 99 = Don't know	|__|__| **If 'No' or 'Don't know' skip to module 8**
C32	When did you start accepting vouchers? (mm/yyyy) *Write 99 if not known*	|__|__|/|__|__|__|__|
C33	How often do you redeem your vouchers? 1 = Weekly 2 = Every 2 weeks 3 = Monthly 4 = Other (please specify) 5 = Have not yet redeemed 99 = Don't know	|__|__|
C34	How often would you like to redeem your vouchers? 1= Weekly 2 = Every 2 weeks 3 = Monthly 4 = Other (please specify) 99 = Don't know	|__|__|

INTERVIEWER: Tell the respondent that you now want them to think about the **last time** they redeemed vouchers. If the respondent has not yet redeemed any vouchers skip to Module 9

C35	When was the last time you redeemed some vouchers? 1 = Less than 1 week ago 2 = 1-2 weeks ago 3 = 2-4 weeks ago 4 = More than one month ago 99 = Don't know	|__|__|
C36	Approximately how many vouchers did you redeem on this occasion? (write number) *Write 9999 if not known*	|__|__|__|__|
C37	Is the redemption process satisfactory or not satisfactory? 1= Satisfactory 2 = Not satisfactory 99 = Don't know/can't say	|__|__| **If 'satisfactory' or 'don't know' skip to Module 9**

C38	If the redemption process is not satisfactory please explain why	**Now skip to Module 9**

Module 8: For shops not currently accepting vouchers

C39	Have you ever accepted vouchers in the past and then stopped? 1= Yes 2 = No 99 = Don't know	|__|__|
C40	Why do you not currently accept vouchers? *(write reason here)*	
C41	Would you like to be involved in a voucher scheme in future? 1= Yes 2 = No 99= Don't know	|__|__|

Module 9: Other outlets selling ITN products in the area

C42	Do you know of any outlets in your area that sell nets and/or insecticides? 1= Yes 2 = No 99 = Don't know	|__|__| **If 'No' or 'don't know' skip to Module 10**
C43	Give their names and physical addresses	

Module 10: Details of outlet and interview

INTERVIEWER: Inform the respondent that you are now going to write down details of the shop and check
what point of sales materials are on display

C44	Are point-of-sales materials on display for Nets? 1= Yes 2 = No	|__|
C45	Are point-of-sales materials on display for Ngao? 1= Yes 2=No	|__|
C46	Are point-of-sales materials on display for TNVS? 1= Yes 2=No	

C47	Location of outlet *(Give as much detail as possible)*	
C48	Write down the GPS co-ordinates of outlet	*E*_______ ^{0} ______.__________ *S* ________ ^{0} _____.__________
C49	Type of outlet 1 = Machinga 2 = Kiosk/Kibanda 3 = Duka 4 = Supermarket 5 = Pharmacy (Part 1) 6 = Duka La Dawa (Baridi – Part 2) 7 = Other (please specify) 99 = Don’t know/can’t tell	|__|__|
C50	Status of Interview 1 = Interview was completed 2 = Outlet is closed temporarily *(take note to come back later)* 3 = Outlet is closed permanently *(report to supervisor)* 4 = Respondent is busy *(make appointment to come at convenient time)* 5 = No cooperation 6 = Other (*specify*)	|__|

Thank the Respondent