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MAP SUMMARY REPORT PSI DASHBOARD

TANZANIA (2009): MAP STUDY EVALUATING THE COVERAGE AND QUALITY OF COVERAGE OF PSI PRODUCTS IN RURAL AND URBAN AREAS.

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Tanzania (2009): MAP Study Evaluating the Coverage and
Quality of Coverage / Market Penetration of Salama
Condoms, Ngao and WaterGuard in Tanzania.

Round Four.

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SUMMARY

BACKGROUND

MAP (Measuring Access and Performance) is a methodology that allows programmers to make an assessment of product availability and accessibility using pre-defined criteria for coverage, quality of coverage and access.

PSI/Tanzania is engaged in the social marketing of a range of health products that directly address the most significant health concerns faced by Tanzanians – malaria, HIV/AIDS, and diarrheal disease. These products are *Salama*, *Salama Studs*, *Salama 3 Bomba*, and *Familia* and *Care* female condoms, *Ngao*, *Ngao ya Muda Mrefu* and *Ngao Iliyoboreshwa* treatment kits, and *WaterGuard* liquid and tablets. These products are distributed via a variety of outlets, primarily employing Tanzania's commercial distribution network. Community distribution mechanisms and institutional/NGO distribution account for a smaller proportion of sales.

RESEARCH OBJECTIVES

This is the fourth round of this MAP study, which has the following objectives: (1) monitor the coverage and quality of coverage of each of PSI/Tanzania's social marketed products (*Salama Regular*, *Salama Studs*, *Salama 3 Bomba*, *Familia* and *Care* condoms, *Ngao* and *Ngao ya Muda Mrefu* and *Ngao Iliyoboreshwa* – (insecticide treatment kits, *WaterGuard* Liquid and tablet point-of-use water treatment) (2) monitor the level of market penetration for the same social marketed products in rural and urban areas.

METHODOLOGY

The MAP methodology employs Lot Quality Assurance Sampling (LQAS) techniques to draw a random sample of 19 enumeration areas (EAs) from rural areas as well as 19 urban areas in each of PSI/Tanzania's five operating zones.

The samples were drawn from Tanzania's 2002 national census and include five supervision zones: Northern, Central, Coastal, Lake and Southern.

This LQAS assessment of coverage determines whether pre-established target levels of availability are met, by estimating the proportion of EAs in each supervision area in which PSI/Tanzania's products are available according to the following minimum standards: for *Salama Regular*, at least two outlets in an EA should be stocking products, the rest of the products coverage standards are met with only one outlet in an EA stocking product. The quality standards were measured using the following indicators: 1 – Product is clearly visible, 2 – Product is within expiry date, 3 – Retail price is at or below a prescribed amount, 4 – Visibility of product promotional materials, and 5 – Absence of regular stock-outs.

Data was collected in July 2009 using PDA's (Personal Digital Assistant – a tool used in collection of data instead of using papers).

MAIN FINDINGS

Among the products, the highest rural coverage was achieved by *Salama* condoms, followed by *Ngao*. Liquid *WaterGuard* was the least available product. The national rural coverage for *Salama* has slightly increase from 77% in 2008 to 80% in 2009.

Ngao availability in rural areas has dropped from 58% in 2008 to 48% in 2009. It is important to note that *Ngao* (insecticide treatment kits) was transformed from regular *Ngao* (had no binder, re-treatment during every wash or after every six month) to *Ngao Iliyoboreshwa* (has a binder and requires retreatment after ten washes). This drop reflects the phasing out of the regular *Ngao* and *Ngao ya Muda Mrefu* in the market. Variations on availability differ across zones, with

Coastal zone recording a relatively higher availability of *Ngao* followed by Central zone.

WaterGuard tablets coverage appeared to be fairly stable with little variations noticed. Central Zone has recorded a higher rural coverage for *WaterGuard* tablets followed by Lake and coastal zone. The coverage of *WaterGuard* tablets and liquid combined indicates a slight decrease in rural coverage for *WaterGuard* – from 35% in 2008 to 28% in 2009.

Minimum quality standards (visibility, expiration, correct price) were usually met where the products were available, though promotional materials were rarely found across zones. Stock outs are common problems for all the products, especially *Salama* condoms and *Ngao* nets. The main sources of supply were reported to be wholesalers, though PSI/Tanzania sales agents also contribute among main sources of supply.

Among all the products, nationally, *Salama* condoms have the highest market penetration of any PSI/Tanzania products, being available in 44% of rural outlets nationwide (i.e. at a similar level as in 2008, when penetration was estimated at 46%) followed by *Ngao* with 19%, which is a decrease by 8% from 27% in 2008 and *WaterGuard* in 7%, compared to 11% in 2008 of national rural outlets. Stock-outs are a common problem especially for *Salama* and *Ngao*. There is a high degree of retailers interested in stocking PSI/Tanzania products from outlets that have never stocked them.

PROGRAMMATIC RECOMMENDATIONS

- Focus efforts on increasing the distribution of products (*WaterGuard*, *condoms and net treatment kits*) to outlets in rural areas. Constant supply will help address the problem of stock-outs that is reported in all geographical locations.

- Efforts are required to increase the distribution of promotional materials to outlets in rural areas. Promotional materials were rarely found and therefore there is a need to improve distribution of promotional materials.
- Identifying and supplying these outlets in rural areas should be accorded programmatic priority if greater rural coverage and market penetration are to be achieved.

FINDINGS

A. COVERAGE

By focusing on geographic coverage rather than market penetration, PSI/Tanzania has adopted a very different approach from our previous efforts to assess product availability. Previously, distribution was measured by selecting a random sample of outlets and examining the proportion that stocked or sold the product. Because outlets are generally clustered together in trading centers, market places and urban locales, a high degree of market penetration does not necessarily translate into availability for those who live at some distance from these locations (as most Tanzanians do).

This approach reflects PSI/Tanzania's commitment to vulnerable populations – in this case, populations that do not have easy access to well-stocked markets and trading centers. A measurement of geographic coverage provides programmatic staff with knowledge that is far more relevant to their work: not merely selling health products, but selling health products *to those at greatest need*. The numbers that translate into the equivalent percentages below can be seen in annex 3.

When looking at the numbers, one should note that they are partly dependent on the presence of outlets in the locations that were sampled (i.e. coverage will be poor in areas where there are few or no outlets/shops). The fourth round of MAP however, did not find any EA without outlets; all the EA's had a number of potential outlets. It has to be noted that the fourth round of MAP revised the coverage measure for *Salama Regular*. To meet coverage standards for *Salama Regular* at least two outlets in an EA had to be stocking the product during the time of the survey. For the rest of the products, coverage is met when at least one outlet is stocking the product during the time of the survey.

It is important to note that coverage levels in different zones may not correlate with sales volumes. This is because the MAP survey round fourth was restricted

to monitor coverage and market penetration which may not necessarily account for sales volume. It is therefore quite possible that a zone has relatively high coverage but low sales, and vice versa.

Coverage, Market Penetration and Quality of Coverage, Simply Defined

Coverage: The proportion of *locations* in which a product is available during the time of the survey

Market Penetration: The proportion of *outlets* that sell a product during the time of the survey

Quality of Coverage: The proportion of locations in which a product is available during the time of the survey *and* meets additional quality standards with regard to visibility, expiration and price.

Rural Coverage:

The table below summarizes the rural coverage for all the products. Any *Salama* stands for all the three extensions of *Salama* condoms being Regular, Studs and 3 Bomba. Similarly for any *Ngao* and any *WaterGuard*. It is important to note that coverage numbers for each specific zone are equivalent percentages from the LQAS while the national coverage averages are calculated as direct percentages and are weighted according to the size of each zone. A complete LQAS number and its equivalencies is found in the annex. To read the below table, the number in brackets are the number of EAs that were stocking the product at the time of the survey and the equivalent percentages are from the LQAS decision rule table

Table: 1 Rural Product Coverage

Product Coverage (Available at time of survey)	Southern Zone		Dar Zone		Central Zone		Lake Zone		Northern Zone		National	
PSI/Tanzania Condoms												
	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009
<i>Salama Regular</i>	75%(12)	65%(10)	55%(8)	45%(6)	60%(9)	75%(12)	70%(11)	65%(10)	50%(7)	55%(8)	49%	48%
<i>Salama Studs</i>	30%(3)	40%(5)	60%(9)	35%(4)	65%(10)	75%(12)	40%(5)	45%(6)	30%(3)	50%(7)	28%	34%
<i>Salama 3Bomba</i>	50%(7)	60%(9)	75%(12)	75%(12)	85%(14)	85%(14)	55%(8)	55%(8)	50%(7)	55%(8)	47%	50%
Any Salama	>95%(17)	95%(16)	80%(13)	80%(13)	90%(15)	>95%(18)	85%(14)	95%(16)	85%(14)	80%(13)	77%	80%
<i>Familia condom</i>	45%(6)	45%(6)	35%(4)	60%(9)	35%(4)	40%(5)	20%(1)	40%(5)	30%(3)	30%(3)	17%	28%
<i>Care female condom</i>	<20%(0)	20%(1)	<20%(0)	20%(1)	20%(1)	25%(2)	<20%(0)	20%(1)	25%(2)	25%(2)	3%	3%
Non PSI/Tanzania Condoms												
<i>Dume condom</i>	45%(6)	40%(5)	35%(4)	65%(10)	35%(4)	60%(9)	20%(1)	25%(2)	40%(5)	35%(4)	20%	27%
<i>Lady Pepeta</i>	25%(2)	25%(2)	25%(2)	20%(1)	20%(1)	25%(2)	20%(1)	20%(1)	<20%(0)	20%(1)	6%	6%
Any Condom	>95(18)	95%(16)	90%(15)	90%(15)	90%(15)	>95%(18)	>95%(17)	95%(16)	90%(15)	80%(13)	84%	87%
PSI/Tanzania ITN and Water Treatment Kits												
<i>Ngao</i>	45%(6)	35%(4)	90%(15)	60%(9)	80%(13)	50%(7)	70%(11)	50%(7)	35%(4)	25%(2)	49%	30%
<i>Ngao ya Muda Mrefu</i>	<20%(0)	45%(6)	65%(10)	<20%(0)	40%(5)	35%(4)	20%(1)	20%(1)	30%(3)	25%(2)	16%	13%
<i>Ngao Iliyoboreshwa</i>	25%(2)	55%(8)	40%(5)	75%(12)	35%(4)	65%(10)	45%(6)	35%(4)	20%(1)	30%(3)	20%	34%
Any Ngao	45%(6)	70%(11)	>95%(18)	85%(14)	85%(14)	75%(12)	80%(13)	55%(8)	45%(6)	35%(4)	58%	48%
<i>WaterGuard Liquid</i>	<20%(0)	25%(2)	25%(2)	35%(4)	20%(1)	40%(5)	20%(1)	30%(3)	30%(3)	20%(1)	7%	13%
<i>WaterGuard Tablets</i>	40%(5)	40%(5)	75%(12)	40%(5)	25%(2)	40%(5)	45%(6)	45%(6)	40%(5)	25%(2)	31%	25%
Any WaterGuard	40%(5)	40%(5)	80%(13)	40%(5)	25%(2)	55%(8)	45%(6)	50%(7)	50%(7)	20%(1)	35%	28%

Rural Coverage Analysis Condoms

Table 1 indicates, of all the three extensions of Salama condoms, *Salama 3 Bomba* has the highest national coverage at 50% followed by *Salama* regular at 48% national coverage. *Salama Studs* have the lowest national coverage at 34%, however this is an increase of 6% from the previous year where national coverage was 28%. While it was possible to make comparison between 2006, 2007 and 2008 market penetration in rural areas.

Coverage measures for 2008 and 2009 cannot be compared with coverage of the previous years because of the change in study approach between the years. For 2006 and 2007 the assessment was between areas served with village bicycle agents (VBA's) and those which were not, while the 2008 and 2009 MAP survey did not measure the same as village bicycle agents no longer exist and therefore the rural, urban performances were assessed. It is therefore possible to have coverage comparison between 2008 and 2009 respectively.

Other social marketed condoms such as *Dume* have an estimated coverage rate of 27%, which is an increase from 20% in 2008, and the recently launched *Familia* (2008) condoms have a rural national coverage rate of 28% (compared to 17% in 2008).

Across zones, any *Salama* condoms are available in most of the rural locations, with Southern Zone, Lake and Central recording the highest coverage at >95%, followed by Coastal and Northern zones with 80%. With the total market approach (assessing all condom availability) in rural areas of Tanzania, national availability increases to 80%.

Care and *Lady Pepeta* female condom have the lowest rural coverage, with *Care* female condoms recording a national rural coverage of 3% and *Lady Pepeta* 6%.

Rural Coverage Analysis Net Treatment kit(Ngao)

Ngao ordinary has been replaced by *Ngao ya Muda Mrefu* (Long lasting ITN treatment kits), and recently this was rebranded as *Ngao Iliyoboreshwa* – improved ITN treatment kits. This study audited all three treatment kits (*Ngao* conventional, *Ngao ya Muda Mrefu* and *Ngao Iliyoboreshwa*). Of the three, *Ngao Iliyoboreshwa* has the highest national rural coverage at 34% followed by conventional *Ngao* 30% and the least national coverage for *Ngao* was for *Ngao ya Muda Mrefu* with 13%. All three *Ngao* (*any Ngao*), when combined, has a national rural coverage of 48%, this is a decrease by 10% from 58% coverage in 2008.

Rural Coverage Analysis WaterGuard

WaterGuard Tablets have the highest rural national coverage at 25% compared to *WaterGuard* Liquid which has an average coverage rate of 13%. The two combined (tablets and liquid) have a rural national coverage of 28%.

Quality of Coverage:

Table: 2 Salama Regular, Quality of Coverage Indicators

	Southern Zone	Coastal Zone	Central Zone	Lake Zone	Northern Zone
SALAMA REGULAR					
Coverage:					
Available at time of survey	65%(10)	45%(6)	75%(12)	65%(10)	55%(8)
Stocked out, but normally available	60%(9)	50%(7)	55%(8)	45%(6)	40%(5)
Quality of Coverage					
1.Product Clearly Visible	65%(10)	45%(6)	70%(11)	60%(9)	55%(8)
2.Product within Expiry Date	65%(10)	45%(6)	75%(12)	65%(10)	55%(8)
3.Product is sold at RRP(or below)	65%(10)	45%(6)	75%(12)	55%(8)	55%(8)
4.Promotional material Visible	25%(2)	45%(6)	45%(6)	45%(6)	20%(1)

Table: 3 Salama Studs, Quality of Coverage Indicators

	Southern Zone	Coastal Zone	Central Zone	Lake Zone	Northern Zone
SALAMA STUDS					
Coverage:					
Available at time of survey	40%(5)	35%(4)	75%(12)	55%(8)	55%(8)
Stocked out, but normally available	30%(3)	35%(4)	60%(9)	35%(4)	50%(7)
Quality of Coverage					
1.Product Clearly Visible	30%(3)	35%(4)	70%(11)	45%(6)	50%(7)
2.Product within Expiry Date	35%(4)	35%(4)	70%(11)	45%(6)	50%(7)
3.Product is sold at RRP(or below)	30%(3)	30%(3)	70%(11)	45%(6)	50%(7)
4.Promotional material Visible	35%(4)	30%(3)	20%(1)	20%(1)	20%(1)

Table: 4 *Salama 3Bomba*, Quality of Coverage Indicators

	Southern Zone	Coastal Zone	Central Zone	Lake Zone	Northern Zone
SALAMA 3 BOMBA					
Coverage:					
Available at time of survey	60%(9)	75%(12)	85%(14)	55%(8)	55%(8)
Stocked out, but normally available	60%(9)	65%(10)	70%(11)	40%(5)	55%(8)
Quality of Coverage					
1.Product Clearly Visible	50%(7)	70%(11)	85%(14)	55%(8)	50%(7)
2.Product within Expiry Date	60%(9)	70%(11)	85%(14)	55%(8)	50%(7)
3.Product is sold at RRP(or below)	55%(8)	65%(10)	85%(14)	50%(7)	50%(7)
4.Promotional material Visible	30%(3)	65%(10)	65%(10)	40%(5)	25%(2)

Table: 5 *Familia condoms*, Quality of Coverage Indicators

	Southern Zone	Coastal Zone	Central Zone	Lake Zone	Northern Zone
FAMILIA CONDOM					
Coverage:					
Available at time of survey	45%(6)	60%(9)	40%(5)	40%(5)	30%(3)
Stocked out, but normally available	45%(6)	55%(8)	25%(2)	35%(4)	25%(2)
Quality of Coverage					
1.Product Clearly Visible	45%(6)	60%(9)	35%(4)	35%(4)	30%(3)
2.Product within Expiry Date	45%(6)	60%(9)	40%(5)	40%(5)	30%(3)
3.Product is sold at RRP(or below)	45%(6)	50%(7)	35%(4)	30%(3)	30%(3)
4.Promotional material Visible	35%(4)	25%(2)	25%(2)	20%(1)	<20%(0)

Table: 6 *Dume condoms*, Quality of Coverage Indicators

	Southern Zone	Coastal Zone	Central Zone	Lake Zone	Northern Zone
<i>DUME CONDOM</i>					
Coverage:					
Available at time of survey	40%(5)	65%(10)	60%(9)	25%(2)	35%(4)
Stocked out, but normally available	40%(5)	65%(10)	45%(6)	20%(1)	35%(4)
Quality of Coverage					
1.Product Clearly Visible	40%(5)	65%(10)	55%(8)	25%(2)	35%(4)
2.Product within Expiry Date	40%(5)	65%(10)	60%(9)	25%(2)	35%(4)
3.Product is sold at RRP(or below)	40%(5)	45%(6)	50%(7)	25%(2)	20%(1)

Table: 7 *Care Female Condoms*, Quality of Coverage Indicators

	Southern Zone	Coastal Zone	Central Zone	Lake Zone	Northern Zone
<i>CARE FEMALE</i>					
Coverage:					
Available at time of survey	20%(1)	20%(1)	25%(2)	20%(1)	25%(2)
Stocked out, but normally available	20%(1)	20%(1)	20%(1)	<20%(0)	<20%(0)
Quality of Coverage					
1.Product Clearly Visible	20%(1)	20%(1)	25%(2)	<20%(0)	<20%(0)
2.Product within Expiry Date	20%(1)	20%(1)	25%(2)	<20%(0)	<20%(0)
3.Product is sold at RRP(or below)	20%(1)	<20%(0)	25%(2)	<20%(0)	<20%(0)

Table: 8 *Ngaio*, Quality of Coverage Indicators

	Southern Zone	Coastal Zone	Central Zone	Lake Zone	Northern Zone
NGAO					
Coverage:					
Available at time of survey	35%(4)	60%(9)	50%(7)	50%(7)	25%(2)
Stocked out, but normally available	35%(4)	55%(8)	40%(5)	35%(4)	20%(1)
Quality of Coverage					
1.Product Clearly Visible	35%(4)	55%(8)	50%(7)	45%(6)	25%(2)
2.Product within Expiry Date	35%(4)	60%(9)	50%(7)	50%(7)	25%(2)
3.Product is sold at RRP(or below)	20%(1)	50%(7)	50%(7)	50%(7)	25%(2)
4.Promotional material Visible	40%(5)	25%(2)	20%(1)	<20%(0)	<20%(0)

Table: 9 *Ngaio ya Muda Mrefu*, Quality of Coverage Indicators

	Southern Zone	Coastal Zone	Central Zone	Lake Zone	Northern Zone
NGAO YA MUDA MREFU					
Coverage:					
Available at time of survey	45%(6)	<20%(0)	35%(4)	20%(1)	25%(2)
Stocked out, but normally available	40%(5)	<20%(0)	30%(3)	<20%(0)	20%(1)
Quality of Coverage					
1.Product Clearly Visible	35%(4)	<20%(0)	35%(4)	20%(1)	25%(2)
2.Product within Expiry Date	40%(5)	<20%(0)	35%(4)	20%(1)	25%(2)
3.Product is sold at RRP(or below)	35%(4)	<20%(0)	35%(4)	20%(1)	25%(2)
4.Promotional material Visible	35%(4)	<20%(0)	25%(2)	20%(1)	<20%(0)

Table: 10 *Ngao Iliyoboreshwa*, Quality of Coverage Indicators

	Southern Zone	Coastal Zone	Central Zone	Lake Zone	Northern Zone
NGAO ILIYOBORESHWA					
Coverage:					
Available at time of survey	55%(8)	75%(12)	65%(10)	35%(4)	30%(3)
Stocked out, but normally available	60%(9)	70%(11)	55%(8)	35%(4)	20%(1)
Quality of Coverage					
1.Product Clearly Visible	45%(6)	70%(11)	60%(9)	35%(4)	30%(3)
2.Product within Expiry Date	55%(8)	70%(11)	65%(10)	35%(4)	30%(3)
3.Product is sold at RRP(or below)	55%(8)	65%(10)	60%(9)	35%(4)	30%(3)
4.Promotional material Visible	<20%(0)	35%(4)	<20%(0)	20%(1)	<20%(0)

Table: 11 *Waterguard Liquid*, Quality of Coverage Indicators

	Southern Zone	Coastal Zone	Central Zone	Lake Zone	Northern Zone
WATERGARD LIQUID					
Coverage:					
Available at time of survey	25%(2)	35%(4)	40%(5)	30%(3)	20%(1)
Stocked out, but normally available	<20%(0)	35%(4)	30%(3)	30%(3)	20%(1)
Quality of Coverage					
1.Product Clearly Visible	<20%(0)	35%(4)	35%(4)	30%(3)	20%(1)
2.Product within Expiry Date	<20%(0)	35%(4)	35%(4)	30%(3)	20%(1)
3.Product is sold at RRP(or below)	<20%(0)	35%(4)	35%(4)	30%(3)	20%(1)

Table: 12 *Waterguard* Tablets, Quality of Coverage Indicators

	Southern Zone	Coastal Zone	Central Zone	Lake Zone	Northern Zone
WATERGARD TABS					
Coverage:					
Available at time of survey	40%(5)	40%(5)	40%(5)	45%(6)	25%(2)
Stocked out, but normally available	40%(5)	35%(4)	40%(5)	35%(4)	25%(2)
Quality of Coverage					
1.Product Clearly Visible	25%(2)	35%(4)	30%(3)	45%(6)	25%(2)
2.Product within Expiry Date	40%(5)	40%(5)	40%(5)	45%(6)	25%(2)
3.Product is sold at RRP(or below)	35%(4)	35%(4)	25%(2)	45%(6)	25%(2)

Quality of Coverage Analysis:

Quality of coverage indicators vary across products and zones. Having noted these variations, this section therefore will present quality of coverage findings per product in each zone. Table 2 above presents quality of coverage indicators for *Salama Regular*, most of quality of coverage indicators are met for *Salama Regular* (issues pertaining to product visibility, retail recommended price, expiry dates for the sold product and promotional materials availability). However it is important to note that though most of these indicators are met, availability of promotional materials remains a problem across all zones for *Salama Regular*. Stock-outs are also another major challenge for *Salama Regular*, with Coastal and Lake zones recording higher levels of stock outs.

Salama Studs (table 3) have similar findings for quality of coverage. Most of the indicators are met where products are available. Some zones have performed poorly on quality of coverage indicators compared to other zones; Southern and Coastal zones have lower quality of coverage indicators standards compared to the rest of the zones. As for *Salama Regular*, promotional materials remain a challenge for PSI/Tanzania. Stock-out is of general concern in most of the zones, with Central and Lake zones recording higher levels of product stock-outs during the 4 weeks preceding the survey. Wholesalers are the main sources of supply for *Salama Studs* across zones.

Table 4 presents quality of coverage findings for *Salama 3 Bomba*, again most of these indicators were generally met across zones. Promotional materials are however a concern to address in most of the zones. Levels of stock-outs are higher across zones. Wholesalers are the main source of *Salama 3 Bomba*, followed by PSI/Tanzania sales agents.

The *Familia* condoms quality of coverage indicators are presented in table 5. In most zones quality of coverage indicators are generally met. It is however important to note that to the standards for visibility and recommended retail price

are not commonly met, especially in Central zone. In Northern zone three EA stocked *Familia* condoms compared to one EA the previous year.

Though this study could not measure all quality of coverage indicators for *Dume*, it was of interest to compare some of its quality of coverage indicators. Table 6 therefore present quality of coverage indicators for *Dume* condoms. Most of the quality of coverage indicators are met; again wholesalers are the main sources of supply. Stock-out of *Dume* is also a matter for concern as it is for PSI/Tanzania's condoms, especially in Lake Zone.

Table 7 presents quality of coverage findings for female condoms, *Care*. This is meant to provide additional options on top of male condoms. Availability of these condoms is of concern as in most cases these products are rarely found compared to male condoms. Across zones both products are rarely found. Quality of coverage appears to be generally low. Wholesalers' are again mentioned as the main source of these products.

Quality of coverage indicators for *Ngao*, *Ngao ya Muda Mrefu* and *Ngao Iliyobreshwa* are presented in tables 8, 9 and 10. Across zones and for the three *Ngao* mentioned above, quality of coverage indicators are met in some of the zones and in other zones are not. For regular *Ngao* quality of coverage indicators are generally met in Coastal, Central and Lake zones. *Ngao ya Muda Mrefu* is met only in Coastal zone. Qualities of coverage for *Ngao Iliyobreshwa* were rarely met in all the zones. Promotional materials are again rarely found in all the zones, while the main sources of supply are wholesalers. PSI/Tanzania sales agents also contribute to the supply of *Ngao*.

WaterGuard tablets and liquid quality of coverage indicators are presented in tables 11 and 12. As presented for other PSI/Tanzania social marketed products, quality of coverage indicators for *WaterGuard* are generally met across zones. It is important to note however that, promotional materials for *WaterGuard* are rarely found in almost all the zones. In locations where the product was found,

stock outs are generally higher and wholesalers are the main sources of supply for this product. PSI/Tanzania sales agents also were mentioned among the main sources of supply.

B. Rural Market Penetration

Market penetration refers to the proportion of outlets within the sample area stocking the product during the time of the survey. This being the fourth round of MAP survey in PSI/Tanzania a trend analysis comparison is presented in the following sections of this document. The comparison will be from 2006 when we had our baseline MAP survey to 2009. Similar to coverage, market penetration numbers are presented at the zonal level and comparison done for the past four years.

Market penetration (% of rural outlet with product).	SOUTHERN ZONE				COASTAL ZONE				CENTRAL ZONE				LAKE ZONE				NORTHERN ZONE				NATIONAL			
	2006	2007	2008	2009	2006	2007	2008	2009	2006	2007	2008	2009	2006	2007	2008	2009	2006	2007	2008	2009	2006	2007	2008	2009
SALAMA REGULAR	42%	52%	59%	49%	28%	32%	36%	19%	56%	40%	50%	44%	42%	38%	42%	44%	26%	19%	19%	22%	40%	37%	39%	36%
SALAMA STUDS	2%	11%	4%	11%	3%	12%	17%	9%	1%	6%	21%	25%	4%	7%	8%	8%	2%	3%	2%	10%	4%	8%	9%	13%
SALAMA 3BOMBA	n/a	12%	14%	27%	n/a	14%	24%	23%	n/a	9%	28%	30%	n/a	11%	20%	19%	n/a	5%	8%	13%	n/a	10%	18%	23%
ANY SALAMA	42%	60%	64%	65%	31%	42%	50%	31%	56%	41%	62%	60%	45%	42%	48%	54%	27%	26%	23%	25%	40%	42%	46%	44%
ANY CONDOM	42%	61%	65	66	32%	42%	51%	32%	57%	41%	63%	61%	45%	43%	50%	55%	27%	27%	23%	26%	41%	44%	49%	47%
FAMILIA CONDOM	n/a	n/a	3%	7%	n/a	n/a	6%	12%	n/a	n/a	6%	8%	n/a	n/a	3%	8%	n/a	n/a	2%	3%	n/a	n/a	4%	7%
DUME	2%	15%	11%	7%	2%	11%	7%	21%	4%	9%	10%	21%	1%	6%	5%	6%	4%	5%	6%	8%	3%	9%	8%	12%
NGAO	11%	12%	14%	5%	17%	28%	31%	10%	23%	24%	44%	8%	26%	19%	16%	11%	11%	6%	5%	2%	18%	16%	20%	5%
NGAO YA MUDA MREFU	0%	4%	0%	7%	3%	7%	21%	0%	27%	12%	7%	5%	2%	6%	1%	1%	5%	2%	3%	3%	7%	6%	6%	3%
NGAO ILYOBORSHWA	n/a	n/a	2%	11%	n/a	n/a	9%	18%	n/a	n/a	4%	19%	n/a	n/a	11%	15%	n/a	n/a	1%	4%	n/a	n/a	5%	13%
ANY NGAO	11%	14%	15%	19%	20%	32%	48%	25%	38%	28%	50%	25%	27%	20%	29%	23%	15%	7%	7%	8%	22%	18%	27%	19%
WATERGUARD LIQUID	1%	4%	0%	0%	2%	8%	2%	4%	3%	2%	1%	6%	1%	6%	1%	5%	3%	0%	2%	1%	2%	3%	1%	4%
WATERGUARD TABLETS	3%	6%	10%	6%	5%	11%	32%	6%	3%	6%	2%	9%	4%	6%	8%	11%	3%	2%	4%	2%	4%	6%	10%	6%
ANY WATERGUARD	3%	9%	10%	6%	6%	15%	33%	7%	4%	7%	2%	9%	4%	4%	7%	14%	5%	2%	5%	3%	4%	7%	11%	7%

Rural Market Penetration Analysis

Availability of *any Salama* condoms in most of the zones varies across zones over time, Northern and Lake zones have recorded a significant increase in market penetration as compared to other remaining zones. Central, Southern and Coastal however report a decrease in penetration of *Salama* regular as compared to the previous year. When compared with other extensions of *Salama*, *3 Bomba* record a general increase in penetration across zones with central 30% and southern 27% penetration.

The national market penetration for *any Salama* apparently remained stable between 2008 (46%) and 2009 (44%).

Market penetration for PSI/Tanzania condoms is higher than other non PSI/Tanzania condoms; this is for both non PSI social marketed condoms as well as other commercial brands such as *Durex* and *Raha*. Market penetration for *Dume* has increased from 8% in 2008 to 12% in 2009.

Ngao (insecticide treatment kits) were transformed from regular *Ngao* to *Ngao ya Muda Mrefu* and now *Ngao Iliyoboreshwa*. Market penetration for any *Ngao* varies for each zone. National trend indicates a change from 22% in (2006) to 18% in (2007), 27% in (2008) and a slight decrease to 19% in (2009). This is expected as currently there is no more supply of *Ngao* conventional nor *Ngao ya Muda Mrefu* in the market. It is expected that our next round of MAP will determine the availability of *Ngao* in reflection of these transformations.

Market penetration for *WaterGuard* also differs for different zones. Increase in market penetration for any *Waterguard* is noted only in Lake Zone. In the remaining zones, the penetration rate for any *Ngao* has decreased.

URBAN COVERAGE: 2008 & 2009

The table below presents a comparison of urban coverage for the past two years, 2008 and 2009.

Product Coverage (Available at time of survey)	Southern Zone		Dar Zone		Central Zone		Lake Zone		Northern Zone		National	
PSI/Tanzania Condoms												
	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009
<i>Salama Regular</i>	80%(13)	70%(11)	55%(8)	90%(15)	60%(9)	95%(16)	70%(11)	90%(15)	50%(7)	85%(14)	51%	75%
<i>Salama Studs</i>	>95%(17)	60%(9)	60%(9)	>95%(18)	65%(10)	90%(15)	40%(5)	90%(15)	30%(3)	85%(14)	41%	74%
<i>Salama 3Bomba</i>	90%(16)	70%(11)	75%(12)	>95%(17)	85%(14)	95%(16)	55%(8)	80%(13)	50%(7)	>95%(18)	55%	79%
Any Salama	>95%(17)	>95%(17)	80%(13)	>95%(18)	90%(15)	>95%(19)	85%(14)	>95%(18)	85%(14)	>95%(19)	76%	96%
<i>Familia condom</i>	>95%(19)	45%(6)	35%(4)	75%(12)	35%(4)	90%(15)	20%(1)	80%(13)	30%(3)	65%(10)	29%	60%
<i>Care female condom</i>	45%(6)	20%(1)	<20%(0)	30%(3)	20%(1)	65%(10)	<20%(0)	25%(2)	25%(2)	25%(2)	9%	16%
Non PSI/Tanzania Condoms												
<i>Dume condom</i>	20%(1)	65%(10)	35%(4)	>95%(17)	35%(4)	90%(15)	20%(1)	60%(9)	40%(5)	80%(13)	16%	65%
<i>Lady Pepeta</i>	35%(4)	20%(1)	25%(2)	60%(9)	20%(1)	65%(9)	20%(1)	35%(4)	<20%(0)	50%(7)	7%	30%
Any Condom	>95%(18)	>95%(18)	>95%(18)	>95%(18)	>95%(19)	>95%(19)	>95%(18)	>95%(18)	>95%(18)	>95%(19)	96%	96%
PSI/Tanzania ITN and Water Treatment Kits												
<i>Ngao</i>	40%(5)	30%(3)	90%(15)	45%(6)	80%(13)	>95%(17)	70%(11)	70%(11)	35%(4)	50%(7)	49%	45%
<i>Ngao ya Muda Mrefu</i>	60%(9)	35%(4)	65%(10)	25%(2)	40%(5)	70%(11)	20%(1)	50%(7)	30%(3)	50%(7)	16%	32%
<i>Ngao Iliyoboresha</i>	30%(3)	55%(8)	40%(5)	>95%(17)	35%(4)	80%(13)	45%(6)	60%(9)	20%(1)	75%(12)	20%	60%
Any Ngao	30%(3)	65%(10)	>95%(18)	>95%(19)	85%(14)	>95%(18)	80%(13)	>95%(17)	45%(6)	80%(13)	58%	79%
<i>WaterGuard Liquid</i>	>95%(17)	20%(1)	25%(2)	85%(14)	20%(1)	75%(12)	20%(1)	50%(7)	30%(3)	30%(3)	7%	34%
<i>WaterGuard Tablets</i>	20%(1)	30%(3)	75%(12)	85%(14)	25%(2)	65%(10)	45%(6)	65%(10)	40%(5)	25%(2)	31%	37%
Any WaterGuard	55%(8)	30%(3)	80%(13)	90%(15)	25%(2)	95%(16)	45%(6)	65%(10)	50%(7)	30%(3)	35%	44%

Urban Coverage Analysis:

Urban coverage for any *Salama* is high in all five zones; this means most of the urban outlets were found to be stocking *Salama* condoms during the survey. In all the zones, on average, any *Salama* condoms had a coverage level of above 90%. Most of the urban outlets stock any of the three *Salama* extensions. Other PSI/Tanzania condoms – such as *Familia* had an urban coverage rate ranging between 45% in Southern zone and 90% in Central zone.

Among non PSI condoms, *Dume* urban coverage has increased in almost all the zones, with more than 90% in Coastal,

The two available female condoms in the market had different coverage performances, with *Care* condoms recording coverage rates between 20% and 65%. A non PSI/Tanzania female condom – *Lady Pepeta* – had a similar urban coverage level, with the lowest urban coverage at 20% in Southern and the highest at 65% in Central zone.

Urban coverage for any Ngao insecticide treatment kits (*Ngao Regular*, *Ngao ya Muda Mrefu* and *Ngao Iliyoboreshwa*) is high in most of the urban locations. In all the zones, coverage for any *Ngao* is between 65% and 90% with Coastal, Central and Lake zones having an urban coverage above 95%.

Any *Waterguard* urban coverage is between 30% in Northern and Southern and 95% in Central zone. Most of the locations in urban Southern and Northern zone did not have water treatment kits – *WaterGuard* during the time of the survey. It is also important to note that, comparing the (2008) results and (2009), coverage performance for *WaterGuard* indicate to have increased across zones.

URBAN MARKET PENETRATION: 2008 & 2009

Market Penetration (% of urban outlets with product)	Southern Zone		Coastal Zone		Central Zone		Lake Zone		Northern Zone		National	
	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009
PSI/Tanzania Condoms												
<i>Salama Regular</i>	51%	45%	44%	32%	53%	33%	56%	37%	36%	26%	47%	32%
<i>Salama Studs</i>	38%	22%	37%	30%	40%	28%	35%	23%	25%	24%	33%	25%
<i>Salama 3 Bomba</i>	40%	37%	37%	34%	48%	41%	53%	36%	33%	28%	41%	34%
Any Salama	66%	47%	59%	43%	77%	49%	76%	43%	51%	39%	64%	46%
<i>Familia Condoms</i>	9%	11%	4%	13%	15%	33%	19%	24%	5%	7%	10%	15%
<i>Care Female Condoms</i>	1%	1%	1%	2%	4%	14%	2%	2%	0%	1%	1%	3%
Non PSI/Tanzania Condoms												
<i>Dume</i>	12%	16%	24%	34%	13%	27%	26%	25%	13%	21%	18%	25%
<i>Lady Pepeta</i>	5%	1%	3%	6%	4%	12%	10%	5%	4%	4%	5%	6%
Any Condom	69%	53%	61%	44%	78%	50%	77%	61%	53%	39%	65%	50%
PSI/Tanzania ITN and Water Treatment Kits												
<i>Waterguard Liquid</i>	1%	1%	22%	17%	8%	12%	18%	10%	3%	1%	10%	8%
<i>Waterguard Tablets</i>	10%	3%	19%	15%	8%	11%	16%	12%	5%	1%	11%	8%
Any Waterguard	10%	3%	26%	19%	11%	13%	24%	15%	6%	1%	15%	12%
<i>Ngao</i>	19%	2%	27%	3%	44%	29%	43%	12%	17%	3%	28%	9%
<i>Ngao ya Muda Mrefu</i>	3%	5%	12%	1%	4%	13%	7%	5%	10%	3%	8%	5%
<i>Ngao Iliyoboreshwa</i>	3%	6%	18%	24%	19%	21%	17%	13%	8%	15%	12%	16%
Any Ngao	24%	10%	48%	26%	52%	30%	50%	26%	29%	20%	39%	22%

Urban Market Penetration Analysis:

Urban market penetration in urban areas varies across zones. Of all the *Salama* extensions, *Salama 3 Bomba* has the highest penetration rate at 34%, followed by *Salama* regular at 32% and *Salama Studs* at 25%. National urban market penetration for any *Salama* has decreased from 64% in 2008 to 46% in (2009). Generally, market penetration of condoms in urban areas has decreased in all the zones compared to 2008 results.

Availability of *Familia* condoms has increased in urban areas compared to the previous year. Market penetration for *Familia* has increased from 10% in 2008 to 15% in 2009.

Similar to the coverage findings, the penetration rate for *Dume* condom has increased from 18% in 2008 to 25% in 2009. This increase is noted in all the zones where PSI/Tanzania operates, with the Coastal zone recording the highest market penetration for *Dume* at 34%, followed by Lake zone at 25%.

Availability of *WaterGuard* in urban locations has likely decreased, from 15% in 2008 to 12% in 2009. This decrease is noted for both *WaterGuard* tablets (which decreased from 11% in 2008 to 8% in 2009) and *WaterGuard* liquid (10% in 2008, 8% in 2009).

Urban market penetration for any *Ngao* – insecticide treatment kits (*Ngao Regular*, *Ngao ya Muda Mrefu* and *Ngao Iliyoboreshwa*) varies from one zone to another. The recently launched *Ngao Iliyoboreshwa* records the highest market penetration at 16%. The national market penetration for any *Ngao* has also decreased, from 39% in 2008 to 22% in 2009.

OTHER FINDINGS

a. Intention to Stock PSI Products

“Intention to stock” reflects the percentage of retail owners who currently do not sell a product but who indicate that they would be interested in selling it in the future. Results suggest that fairly large proportions of outlets are willing to sell one or more of PSI’s social marketed products, particularly among traditional outlets. For instance, around 60% of traditional outlets in all the zones were interested in selling condoms should they be supplied.

b. Cell phone access and ownership

Figure: 3 Mobile ownership

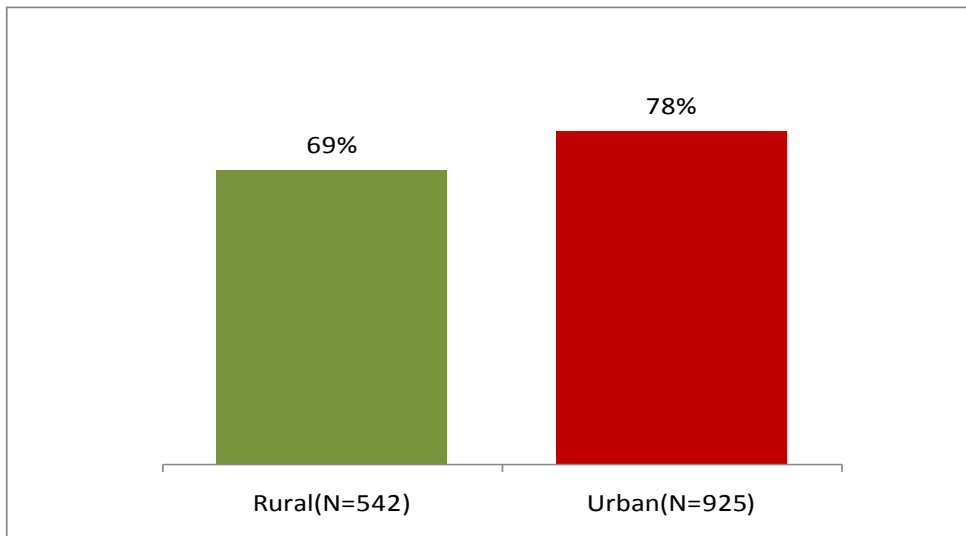
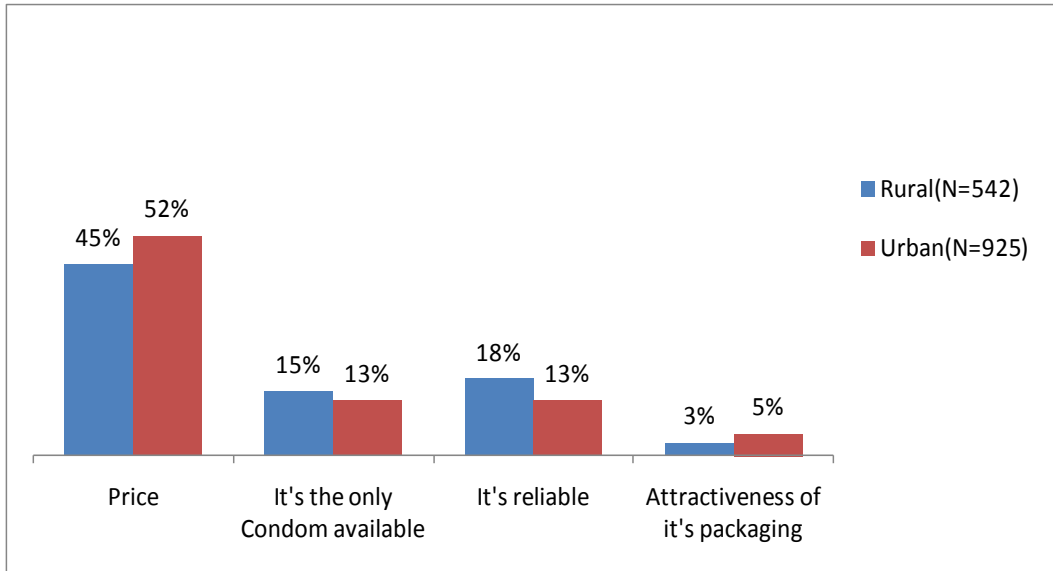


Figure 3 above indicates that ownership/access of cell phone is higher in urban areas compared to rural areas, 69% of outlets owners in rural areas had access to or own a cell phone compared to 78% of urban owners reported to have a cell phone. This is an important observation for PSI/Tanzania especially when planning to invest on the use of webbased reporting mechanism which might in future replace the normal MAP studies to capture real availability of products.

c. Attributes that makes a person buy *Salama* condoms



Among attributes that outlet owners mentioned to make customers buy Salama condoms were 52% price for urban and 45% for rural. This indicates that the price of a condom matters for someone to use a condom (please note that these are perceptions of the sellers and not buyers as this study interviewed those who sells condoms and not buyers/users).

III. LIMITATIONS

MAP studies provide measures of coverage with geographic areas used for the denominator. The reader is reminded that the Lot Quality Assurance Sampling (LQAS) is a hypothesis test that doesn't produce precise measurements of coverage at the supervision area level: areas are classified as "adequately" or "inadequately" covered.

- Some of the EA's were difficult to reach due to bad roads and poor communication. This therefore slowed the planned time to finish data collection.
- The charging of PDA's was highly affected in areas where electricity was not available. Data collectors had to travel long distance to cities in order to charge the PDA's. This slowed the accomplishment of the survey by 5 days from the planned days.
- It is always time consuming to explain and introduce the device to local government officials and outlet owners as in some cases some fear that the device is not only for collecting data but other tasks such as monitoring sales. Though this is still a challenge, but acceptance has been increasing from local leaders and outlets owners
- In areas where sampled wards did not have maps or where maps from the national census did not give clear boundaries, data collectors had to spend more time working with local informers/leaders within the area to help explain and show the boundaries of such locations.

IV. CONCLUSIONS AND PROGRAMMATIC RECOMMENDATIONS

- *Salama* condom brand has the highest coverage compared to other PSI/Tanzania social marketed products, followed by *Ngao*. *WaterGuard* has the least coverage of the entire product.
- It is clear that stock-outs are a common problem, and that there is a high degree of “unmet demand” for PSI products from outlets that have never stocked them
- The coverage of Public sector condoms is low across all districts. This indicates that there is little overlap between public and socially marketed condoms suggesting no competition between PSI and the Public Sector.
- Promotional materials are rarely found in most of the zones.

Therefore we recommend: -

- Improve distribution of products (*WaterGuard, condoms and net treatment kits*) to outlets in rural areas. Constant supply of these products in rural outlets is possibly going to address this problem and improve product availability in most of the rural outlets.
- Promotional materials are rarely found in most of the zones, therefore PSI/Tanzania should address this problem by increasing distribution of promotional materials to outlets in rural areas that sell the PSI/Tanzania marketed products.
- Identifying and supplying these outlets in rural areas with products should be accorded programmatic priority if greater rural coverage and market penetration are to be achieved.

- PSI sales visits to outlets need to be improved. Field visits schedules need to be developed and/or to be adhered to. Visit schedules should be used for the monitoring and supervision of all quality of coverage issues. The schedules should feed into reporting mechanism by Regional Officers.
- The program should capitalize on outlets that are currently not stocking PSI/Tanzania products especially *Salama* and waterGuard but are willing to do so. These present sales growth potential. The program should then focus on raising awareness among such outlets about the availability of products and where they can be purchased either on retail or wholesale basis.

APPENDIX 1: Glossary

DEFINITIONS and ACRONYMS:

Term	Definition
Census Unit	Census units are small territorial units as established during the national population census, which was conducted in the year 2000 by the PNG National Statistics Office. They are the unit of analysis for the coverage and quality of coverage analysis.
Coverage	Coverage is the proportion of geographic units in which a minimum standard of product or service availability is present. The primary use of the coverage indicator is in determining whether proximity of populations to PSI products and services is increasing or decreasing over time. The lowest minimum standard of availability is the presence of at least one outlet in the area that delivers any product or service that PSI also delivers.
LQAS	Lot Quality Assurance Sampling is a sampling and analysis method that is used to determine, with a level of precision that is sufficient for decision-making purposes, whether a given area reaches a pre-established benchmark or not.
MAP	MAP (Measuring Access and Performance) studies are a tool for measuring the performance of social marketing product and service delivery systems in developing countries. PSI measures social marketing performance among vulnerable populations at the individual level as well as by assessing the delivery systems by which the populations are reached. The latter is achieved through MAP: Measuring Access and Performance. MAP studies are designed to measure the coverage, quality, and equity of access of social marketing product and service delivery systems. With this additional evidence, our social marketers take action to continuously improve upon the cost-effectiveness, equity, and efficiency of our interventions.
Outlets	Outlets are those that may potentially sell or distribute condoms, such as supermarkets, kiosks, mini marts, pharmacies, bars, hotels, night clubs, etc. Only those outlets that are inside the selected CUs and within the approximate hotzone boundaries were included in the survey.
Penetration	Penetration is the proportion of outlets in which a product or service is available: out of all potential outlets for a given product or service, it is the percentage of outlets that actually sell the product or provide the service.
Quality of Coverage	Quality of coverage is the proportion of geographic units in which the PSI product or service delivery system is available and conforms to additional minimum standards as described later in the report.
Rural	The rural part of the PNG is divided into two sectors; "Rural villages" and "Rural non-villages". The rural village sector is made up of rural village census units, each of

	<p>which is an area containing a village where traditional activities predominate regardless of whether or not the dwellings in the village are traditional.</p> <p>The rural non-village sector is made up of non-village census units, each of which is an establishment or location where non-traditional activities predominate. These are schools, aid posts, missions, plantations, base camps, government stations, unorganized migrant settlements or organized settlement blocks.</p>
Stock out	Outlets that do not have condoms available in the last 4 weeks prior to the audit are considered in this survey as a stock out.
Urban	An area comprising settlements known as either a city or a town with a minimum population of 500 persons and a minimum population density of 195 persons per square kilometer.