Social Marketing of ITNS in Kenya: Project Completion Review

DRAFT NARRATIVE REPORT

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Contents

Acronyms and Abbreviations

ACT	Artemisinin-based Combination Therapy
ANC	Antenatal Care
AOP	Annual Operational Plan
BCC	Behaviour change communications
CBO	Community-based Organisation
CCM	Country Coordination Mechanism
DCH	Division of Child Health
DDT	Dichlo-Diphenyl-Trichlorethane
DFID	Department for International Development
DoMC	Division of Malaria Control
DRH	Division of Reproductive Health
EPI	Expanded program on Immunisation
FANC	Focused Antenatal Care
FBO	Faith Based Organisation
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
HMIS	Health and Management Information System
IMCI	Integrated Management of Childhood Illnesses
IPTMP	Intermittent Preventive Treatment for Malaria in Pregnancy
IRS	Indoor Residual Spraying
ITN	Insecticide Treated Bednet
JPWF	Joint Programme of Work Framework
KDHS	Kenya Demographic Health Survey
KEMRI	Kenya Medical Research Institute
KEMSA	Kenya Medical Supplies Agency
KNMP	Kenya National Malaria Programme
KRC	Kenya Red Cross
LLIN	Long Lasting Insecticide Treated Bednet
M&E	Monitoring and Evaluation
MICC	Malaria Inter-Agency Coordination Committee
MIS	Management Information System
MoH	Ministry of Health
NGO	Non Governmental Organisation
NHSSP	National Health Sector Strategic Plan
NMBP	National Malaria Business Plan
NMCP	National Malaria Control Programme
NMS	National Malaria Strategy
OPR	Output to Purpose Review
PSI	Population Services International
PW	Pregnant Women
RBM	Roll Back Malaria
RDT	Rapid Diagnostic Test
SWAp	Sector Wide Approach
TA	Technical Assistance
TRaC	Tracking Survey
TWG	Technical Working Group
U-1 and U-5	Children under 1 year old, and under 5 years old
WHO	World Health Organisation
WHO/AFRO	World Health Organisation Africa Office

1. Summary

In December 2001, DFID made an accountable grant of £20m to PSI-Kenya, to begin the social marketing of untreated mosquito nets (Supanet) bundled with a liquid insecticide treatment (KO-Tab). This model followed a similar PSI project in Malawi.

Since then, the programme has had five further DFID grants, totalling just over £70m. Of this total, the bulk, about £50m, has been spent on procurement and shipping of nets. PSI has also received significant funding for malaria prevention from USAID, which has been spent largely on BCC. PSI had to support the project with its own funds on more than one occasion when DFID funding was interrupted.

During the nine years of the project, support has switched from untreated nets (which consumers were reluctant to treat even once, and very reluctant to re-treat) to long-lasting nets; from PSI acting largely on its own, to PSI working closely with government; and from social marketing of paid-for products through shops to free distribution of LLINs to pregnant women and under-ones through ANC and EPI clinics.

The government has distributed free LLINs, notably 3.4m Global Fund nets in a mass distribution in 2006. PSI has distributed over 17m nets - of which about 8m have been free LLINs (2.4m in the 12 months to March 2010). PSI continues to market highly subsidised LLINs in rural shops (over 3m sold, though numbers are declining as free LLINs have become so widely available). In urban areas, PSI sold 2m LLINs before transferring the urban Supanet brand to a commercial company.

Table 1: Total ITNs and Treatment Kits Distributed, by Year (PIS MIS)

Year	ITNs	Treatment kits
2002	530,502	251,987
2003	643,218	562,946
2004	1,191,070	700,002
2005	3,455,082	1,213,110
2006	3,374,552	1,555,360
2007	1,995,205	625,843
2008	2,788,342	931,403
2009	2,664,759	1,015,085
2010 - 31 March	745,117	190,412
TOTAL	17,387,847	7,046,148

The impact of these efforts on malaria in Kenya has been dramatic. Malaria admissions to hospitals in sentinel districts halved between 1999 and 2006, while under-5 mortality has fallen by 44%. Experts agree that most of this impact can be attributed to nets (most of which have been funded by DFID), complemented by the government's US-backed IRS campaign. The project has thus achieved its goal to 'Reduce malaria related morbidity and mortality among vulnerable populations'.

DFID (and USAID) funding of PSI has been complemented by sound leadership from the government's Department of Malaria Control, and by Kenya's policy of free

distribution. WHO advice to the malaria programme (itself funded by DFID), and high quality research and training by KEMRI have helped to create a strong policy environment. PSI has been flexible in its response to changing circumstances, especially the shift to free distribution and to working closely with government.

This is one of DFID's most successful health programmes, thanks to PSI's tight management and efficient distribution, as well as to its skills in communication.

In the current logframe, the purpose is 'Consistent use of ITNS among household members in malaria endemic and epidemic districts'. Such use doubled between 2003 and 2007, and has almost certainly increased further since then, although we do not have reliable data - PSI followed the advice of the 2008 OPR and is now relying on the government's national malaria survey, which will be done in 2010, rather than doing its own survey in 2009.

In PSI's most recent survey in 2007, the percentage of children under-5 in malaria endemic or epidemic-prone areas who slept under 'any net' the previous night was 56%, more than double the 24% in 2003. The percentage of pregnant women who slept under 'any net' the previous night in 2007 was 48%, up from 25% in 2003. The 2008 KDHS recorded a comparable increase. Almost all of the women and children sleeping under a net today are sleeping under a long-lasting one.

Despite the absence of more recent data, the PCR consultant is confident that the project can be scored '1 - fully achieved' in the DFID Project Completion Report.

We do not know if the purpose-to-goal assumption that 'Health workers integrate free net distribution into daily ANC and EPI activities' has proved correct, as PSI does not collect any data to monitor this, and the HMIS data on net distribution is very poor. So we do not know for sure if all, most or just a few women actually get the LLINs, or if they actually use them. Anecdotal evidence suggests that they do both, but the only major criticism of this programme is the weakness of PSI's regular monitoring.

There has been no action on the 2008 OPR recommendation that 'PSI and DOMC should explore ways of reducing the workload of facility staff presented by LLIN distribution'. Other than a funding shortfall limiting the number of nets (which was a looming threat at the time of this review, after the Global Fund had rejected Kenya's Rd 9 application), excessive workload is still the biggest risk to the programme.

The Output-to-Purpose logic relies on one assumption, that 'Determinants of ITN use are amenable to communication interventions'. Establishing causal linkage between BCC and behaviour is notoriously difficult, and PSI's 2007 TRaC survey did not reveal if net use was related to exposure to BCC, but research does show that the main driver of net use is 'social norms', i.e. that people will use nets if they believe that other people like themselves also use them. It seems unlikely to this consultant that communication has had much impact on use. It seems more likely that the increased LLIN use is driven by some simple factors inherent in the current programme:

- The new LLINs are a much better product than the old untreated nets, because they do not need re-treatment (which most net-users in most countries proved reluctant to do, despite extensive BCC to encourage them).
- Most of the LLINs are free; and those that are not free are very cheap
- They are given to women at an opportune time (when they get pregnant and come to the ANC clinic, or when they bring their infants for immunisation).

- They work, and the people using them can see that they work.

DFID has committed more than half of its entire health spending in Kenya to this programme, and has managed to maintain the funding in spite of the periodic ebb and flow of UK political support for continuing aid to Kenya. PSI in Kenya has transformed itself from a stand-alone INGO committed to charging for public-health products, to what is now principally, in this project, a distribution agency working for the government. WHO has wisely stuck to its primary role as an expert adviser, and thus maintained the trust of all parties. DOMC has largely avoided trying to implement things, adopting instead the 'stewardship' role of planning and coordinating, which theory suggests is the right role for a modern health ministry.

WHO has recently done a costing exercise, so (unusually) we have some comparative costs. The programme is definitely 'efficient' – and not just PSI, but malaria policy and programming in Kenya is efficient. It is certainly 'effective' - we have robust work from KEMRI on the impact. The purchase and distribution of LLINs is almost certainly cost-effective. It is harder to say whether the BCC is cost-effective – but then this always is difficult to show, one way or the other.

This report makes eight recommendations.

1. DFID should make sure PSI's new 2010-2015 programme does, as planned, monitor whether all women who come to the clinics are actually getting an LLIN; and how many of those who do who get them are using or not using them as intended.

2. More consistent funding from DFID would have helped the programme (there have been no less than 5 extensions and twice PSI has had to rely on its own funds to bridge funding gaps). DFID and the FCO should together agree on some criteria to enable consistent funding of programme such as this in the future, were UK-Kenyan relations to again deteriorate.

3. DFID should encourage WHO to address with DOMC the specific question 'if there are not enough LLINs in Kenya to do routine distribution and mass distribution, what is the cost/DALY of different options for using the LLINs which are available?'

4. DFID should be more sophisticated in its expectations of 'capacity building' - DFID and DOMC could and should have avoided the distraction of trying to get 10% of LLINs distributed to facilities by KEMSA, which most stakeholders felt was unsuited to taking on such additional tasks at that time.

5. DFID should encourage DOMC to update the ITN framework and share and discuss it with stakeholders.

6. DFID has agreed to fund a further five years of this programme. PSI's logframe for this 2010 to 2015 funding is weak and needs a lot of attention.

7. DFID should continue to fund the purchase and distribution of all LLINs needed for routine distribution at ANC and EPI clinics in Kenya.

8. DFID has committed more than half of all its health spending in Kenya to malaria, most of it to LLINs. Given the success of this, DFID should reflect on whether similar support to, say, contraceptive commodities, might not be the most effective way of spending the other half of its health budget.

2. Terms of Reference

The objectives of this consultancy were twofold:

- To conduct a Project Completion Review (PCR) of DFID's support to bed nets programme against the log frame and complete a DFID PCR report
- Identify lessons learnt from the programme overall which may of benefit to GoK, DFID, partners and which can inform future programming.

To address the terms of reference the consultant:

- Reviewed relevant documentation, including the 2009 National Malaria Review and the new Kenya National Malaria Strategy.
- Undertook a field visit to Nyanza Province from March 10th - 12th where we met with a District Medical Officer and her team and visited 2 Health facilities; met a community group which had received funding from PSI for the promotion of LLINs; met a group of Kenya Scouts and their leaders, who had been visiting homes to promote net-hanging; stopped at a number of shops to discuss the current market for LLINs and treatment kits; and met various members of PSI staff. Visits were made to several houses to listen to residents talk about access, availability and use of ITNs.
- Interviewed staff and advisers at DFID, PSI, DOMC, WHO, KEMSA, KeNAAM, USAID and PMI. A complete list of people met is in Annex 2.
- Held a de-briefing session and Powerpoint presentation at DOMC on March 16th and again on March 17th, attended by DOMC, DFID, WHO and PSI staff.

This narrative report covers three sets of indicators:

- the logframe of the April 2009 to February 2010 extension (which is also covered by the ARIES Excel report of this PCR)
- useful indicators which appeared in previous logframes but not in the current one. This follows an email exchange on March 17th 2009 (see Annex 3)
- In response to the TORs Scope of Work Item 5, 'Make recommendations on future funding and implementation', it also comments on the logframe for DFID's new programme of support to PSI, which will run from 2010 to 2015. (These comments also appear as 'Logframe recommendations' in the ARIES report Sheet A1).

This narrative version largely follows the PCR report in DFID's ARIES format, which has been submitted separately to DFID.

The consultant would like to thank all the professionals and members of the public who took time to talk and volunteered to share their knowledge and experience.

3. Background

The TORs from DFID (see Annex 1) give the following background.

The Social Marketing of Insecticide Treated Bednets (ITNs) started in August 2001 and will end in March 2010. The total value of the project is £71.6 million and it is expected to deliver 17 million ITNs by end of project period. Population Services International (PSI) was awarded an accountable grant to implement the Social Marketing of ITNs project.

The purpose of the project is to increase the use of ITNs among pregnant women and children under 5 and the goal is to reduce morbidity and mortality from malaria. Malaria is one of the leading causes of mortality and morbidity in Kenya. Over 20 million Kenyans are routinely exposed to malaria in endemic areas, and a further 8.5 million are vulnerable in non-endemic areas during epidemics. It accounts for 30% of all outpatient visits, 15% of reported deaths and annually kills 34,000 children under-5 years - a further 145,000 develop severe medical complications. It is also a major contributor to maternal mortality.

The project was extended to March 2010 following post election violence in 2007/08 and the delay in approving the new DFID health programme. The purpose of the extension was to consolidate the gains already made and to maintain the trajectory of increasing net ownership and use, with the resultant reduction in malaria mortality and morbidity.

Concurrent DFID funding has been provided to support implementation of the National Malaria Strategy via the WHO Kenya Office (2002-2009 at a cost of £16 m). WHO has been responsible for supporting an effective policy environment for malaria control in Kenya. As part of this effort, an ITN Implementation framework has been developed which includes a transitional plan to enhance government capacity to take over ITN delivery.

A new health programme was approved by DFID late December 2009. The new programme will adopt a twin-track approach of continuing to fund public health programmes outside government such as this one through PSI, while at the same time providing support to the emerging SWAP. The SWAP building process is progressing slowly, having suffered a set back in following post-election violence, but the process is steadily gaining momentum again. The new DFID support to PSI will continue fund ITNs, albeit at a reduced level.

4. Progress against Logframe Goal and Purpose

4.1. Goal

Reduce malaria related morbidity and mortality among vulnerable populations. (A vulnerable population is defined as pregnant women and children under 5 years of age).

4.1.1. Indicator 1

Decrease parasite prevalence in children under 5 years old in intervention areas from 7.6% in 2007 to <5% in Feb 2010.

4.1.2. Progress

Parasite prevalence in children aged 5-14 years will be reported by a parasitological study conducted as part of the 2010 Malaria Indicator Survey

Parasitaemia is a very precise measure of malaria prevalence but it is not collected that frequently. There is plenty of other data to indicate the goal has been achieved.

Between 1999 and 2006 there was a 44% decline in under-5 mortality in KEMRI's sentinel districts, and a 56% decline in admissions of under-5s for malaria at Kilifi hospital in Coast province. The intensity of malaria transmission in Kenya is declining, as shown by a shift in the mean age of clinical cases from 2.9 years in 1992 to 4.9 years in 2006 in an endemic community in Kilifi district of Coast province.

The decline in under-5s malaria related deaths has played a large part in the overall reduction in infant mortality from 77 to 52 deaths per 1000 live births recorded betwen the 2003 KDHS and the 2008 KDHS surveys.

4.1.3. Recommendation

DFID's 'How To' guidance note suggests that in a PCR, this section should be used to answer the question 'Could more have been achieved?'.

The one factor which would have increased the project's impact by 2010, is if the decision to shift from clinics charging for LLINs to giving them away for free had been taken sooner. More effective monitoring of who was and was not buying the subsidised LLINs at clinics would have alerted DFID and PSI to the fact that not all poorer women were buying LLINs, even at the subsidised price.

More consistent funding from DFID would have helped (there have been no less than 8 extensions and twice PSI has had to rely on its own funds to bridge funding gaps) though this problem was due more to ups-and-downs in UK-Kenyan relations than to factors over which DFID had much control.

4.2. Purpose

Consistent use of ITNS among household members in malaria endemic and epidemic districts

The Purpose score, based on ther Output scores, is 1, 'likely to be completely achieved'.

This has been one of the most successful health projects funded by DFID, with clear and measurable improvements in the health of significant numbers of Kenyans, many of them poor, which can be directly attributed to PSI's programme. PSI itself has done a great job, thanks to several years of hard work, good judgements, persistence and flexibility. The Division of Malaria Control (DOMC) is one of the most effective divisions in the two ministries involved with health, and DFID can also take some credit for this being the case.

4.2.1. Indicator 1

Percentage of children under 5 years old in intervention areas who slept under an ITN the previous night (LLIN or net treated in the last 12 months) increase from 62% in 2007 to 70% in Feb 2010

As recommended by the 2008 OPR, the survey which PSI planned to do in 2009 has been rolled into the national 2010 Malaria Indicator Survey, which will be done later this year. There is thus no 2009 or end-of-project data available.

Both sources of time-series data for the past few years (PSI's own surveys in 2003, 2005 and 2007; and the KDHS in 2003 and 2008) show a steep rise.

They asked different questions.
'Slept under a treated net?': KDHS shows rise from 2003 (5%) to 2008 (46%)
'Slept under any net?'. PSI/Kenya TRaC survey shows a rise from 2003 (24%); 2005 (35%) to 2007, 56%.. The largest increase has come in rural areas.

Table 2: Under-5s Slept Under a Treated Net: Urban/Rural - PSI TRaC

Year	Urban	Rural
2003	52%	17%
2005	63%	26%
2007	58%	44%

4.2.2. Indicator 2

Percentage of pregnant women in intervention areas who slept under an ITN the previous night (LLIN or net treated in the last 12 months) to rise from 42% in 2007 to 60% in Feb 2010.

See above for note on indicators used, and for reasons 2009 data is not available.

Table 3: Pregnant Women Slept under a treated net - KDHS

Year	%
2003	4%
2008	48%

Table 4: Pregnant Women Slept Under Any Net - PSI Kenya TRaC

Year	%
2003	25%
2005	37%
2007	48%

The core of this programme has been the distribution of ITNs - initially the sale of untreated nets bundled with insecticide, then free distribution of these, and more recently free distribution and some sales of long-lasting nets. The actual numbers distributed are an output indicator, but they are presented here at purpose level as they are so important.

Table 5: # ITNs and Treatment Kits Distributed

Year	ITNs	Treatment kits
2002	530,502	251,987
2003	643,218	562,946
2004	1,191,070	700,002
2005	3,455,082	1,213,110
2006	3,374,552	1,555,360
2007	1,995,205	625,843
2008	2,788,342	931,403
2009	2,664,759	1,015,085
2010 - 31 March	745,117	190,412
TOTAL	17,387,847	7,046,148

4.2.3. Purpose-level indicators used in previous logframes

The 2008 OPR reviewed the previous logframe's OVIs (p14), and concluded that the other net-use indicators had almost all been met.

- **OVI 1. Households owning at least one net**. Target: from 22% in 2000 to 75% by Dec 2007. Result: 2007 TRaC survey found that 65% of households nationwide own at least one net, up from 43%% in 2005. Comment: largely achieved.

- **OVI 4. Households with nets in urban and peri-urban areas have re-treated at least once in the past 6 months.** Target: negligible in 2000 to 30% by Dec 2007. Result: 74% of urban households reported ownership of at least one net

treated in the last 6 months or an LLIN. Comment: achieved. (We cannot determine attribution to this project or to the free GoK distribution in 2006).

- **OVI 6. Households with nets in rural areas have had them re-treated at least once in the past six months.** Target: negligible in 2000 to 25% by Dec 2007. Result: 62% of rural households reported ownership of at least one net treated in the last 6 months or an LLIN. Comment: achieved.

4.2.4. Assumptions

The assumption that 'Health workers integrate free net distribution into daily ANC and EPI activities' was probably sound, as the LLIns they distribute are the main source of the recorded rise in net use and decline in malaria. The 2009-2017 National malaria Strategy also explicitly credits this routine distribution for the relatively equitable figures for LLIN ownership and use (the richest quintile is only about 15% more likely to own and use an LLIN than the poorest quintile). The mass distribution of 3m LLINs in 2006 is the other main source, along with sales of subsidised and full-price LLINs.

The project's main weakness has been that it has not monitored the routine distribution and so nobody can say whether a few, some or many health workers have not integrated the distribution of LLINs into ANC and EPI sessions. During each re-supply of LLINs at facilities. the PSI officer checks previous ANC and EPI LLIN distribution records, and anomalies are reported to the District Medical Officer of Health. This should now change, as the proposal for PSI's new 2010-2015 LLIN programme states clearly on page 7 that 'PSI-Kenya manages the monitoring of delivery of LLINs through health facility staff' - this information will be compiled and tracked at District level to identify consistently non-conforming facilities.

4.2.5. Attribution of purpose to goal

The recorded fall in malaria reported above in the Goal indicator cannot be explained by any other change which has taken place in Kenya.

Likewise, there is no explanation for the increased use of LLINs by under-5s and pregnant women, other than the achievement of the outputs, which focus specifically on increased access to, knowledge of and positive attitudes towards treated nets.

4.2.6. Recommendation

As noted above, the 'How To' note says that in a PCR, this section should be used to answer the question 'Could more have been achieved?'

This has been an excellent project in almost all respects. With hindsight PSI could perhaps have put greater effort and resource into those districts in the malarial zones which have the highest malaria prevalence (and could do this in the next phase).

DFID and DOMC could have avoided the distraction of trying to get 10% of LLINs distributed to facilities by KEMSA, if they had taken a more robust and critical line with that organisation, which most stakeholders feel was unsuited to taking on such additional tasks.

5. Outputs

5.1. Output 1

Increased opportunity of vulnerable groups to sleep under ITNs
(Vulnerable groups are children under five and pregnant women, in malarial areas)

This output carries 25% of the impact weighting, and has been scored 1, 'likely to be completely achieved'.

5.1.1. Indicator 1

Percentage of households in intervention areas reporting ownership of at least TWO treated net (includes a net treated in the last 12 months or LLIN).

Target: 45%

Progress
This is a new indicator, introduced in this 2009-10 extension to align PSI's objectives with those of the National Malaria Strategy, which in turn were aligned with WHO's new targets. The only data available is from a 2007 baseline survey (the PSI TRaC survey), when 27% of households had 2 LLINs or a recently treated ITN.

On the advice of the 2008 OPR, PSI's planned 2009 survey, which would have given trend data for this indicator, has been rolled into the 2010 Malaria Indicator Survey, to be done later this year.

From 2002-2007, the percentage of households that owned at least one net regardless of its treatment' was collected, and PSI/Kenya's TRaC surveys showed that this rose as follows: 2000, 22%; 2003, 30%; 2005, 43%; 2007, 65%

In 2005 and 2007, TRaC surveys collected 'the percentage of households that own at least one ITN, i.e. LLIN or have or re-treated their nets in the past six months' , and this shows not only a large rise in ownership, but also that it rose almost as much in rural areas as it did in urban, reflecting the effectiveness and equity of the ANC and EPI distribution.

Table 6: Percentage of households that own at least one ITN - PSI TRaC

Year	National	Urban	Rural
2005	12%	11%	12%
2007	50%	53%	49%

5.1.2. Indicator 2

Percentage of all household respondents who know where to obtain nets.

Target: Rural 90%

Progress
This has probably been achieved. In 2002-2008 log frames this indicator was phrased as "% of household respondents who know where to purchase nets".

Table 7: Percentage of households that know where to purchase nets: PSI TRaC survey

Year	National	Urban	Rural
2003	81.2%	96.5%	75.6%
2005	81.2%	92.2%	77.1%
2007	82.6%	88.8%	80.3%

In 2002-2005, an additional indicator measuring % of respondents who know where to purchase re-treatment was included:

Table 8: % of respondents who knew where to purchase re-treatment - PSI TRaC

Year	National	Urban	Rural
2003	40%	59.7%	32.8%
2005	54.6%	76.7%	46.3%
2007	60.7%	74.7%	55.5%

5.1.3. Indicator 3

Percentage of household respondents reporting that they live within 15 minutes of where they can obtain nets.

Target: Urban 50%; rural 25%

Progress
The 2008 OPR noted that 'this is a poor OVI as surveys show it is not related to net ownership', so it is odd that PSI has included in the 2009-2010 logframe.

Table 9: % of household respondents that live within 15 mins of where to obtain nets

Year	National	Urban	Rural
2003	17.6%	42.7%	8.4%
2005	24.8%	51.3%	15.1%
2007	20.5%	46.4%	10.8%

Comment
The focus of PSI's work has been to get LLINs into the hands of the most vulnerable. By switching from paid to free LLINs and by putting so much effort into making sure that the LLINs are available at every ANC and EPI clinic, the project has achieved this output.

5.2. Output 2

Increased ability of vulnerable groups to sleep under ITNs
(Vulnerable groups are children under five and pregnant women)

This output carries 25% of the impact weighting, and is scored 2, likely to be largely achieved.

5.2.1. Indicator 1

Percentage of HOUSEHOLD respondents know that malaria is most dangerous for pregnant women

Target: 50% by Feb 2010

Progress
The target of 50% by Feb 2010 looks over-ambitious, as previous PSI TRaC surveys suggest that this indicator will not change quickly. The planned 2009 PSI TRaC survey has been rolled into the 2010 national malaria survey, so no 2009 or EOP data is available.

Table 10: % of respondents who know that malaria is most dangerous for pregnant women - PSI TRaC

Year	%
2003	6%
2005	23%
2007	28%

The 2008 OPR noted: 'Not a clear indicator as it does not really mean 'know that the consequences of malaria for the foetus are serious'. Problems were reported by survey interviewers that when translated this did not always accurately reflect the notion of risk to a pregnant woman (rather than risk to the foetus).' 2008 OPR p 21.

5.2.2. Indicator 2

Percentage of household respondents who know that malaria is most dangerous for children under five.

Target: 60% by Feb 2010

Progress
The planned 2009 PSI TRaC survey has been rolled into the 2010 national malaria survey, so no 2009 or EOP data is available. In previous years this had climbed, but then dipped.

Table 11: Percentage of household respondents that know that malaria is most dangerous for children under 5 (PSI TRaC)

Year	%
2003	25%
2005	50%
2007	46%

The 2008 OPR noted that the result is 2007 was lower than in 2005, and suggested that 'more work is needed on how respondents interpret 'at risk' of malaria.

5.2.3. Indicator 3

Percentage of household respondents who identify treated mosquito nets as a method of malaria prevention.

Target: 50%

Progress

It seems odd that PSI should set a target of 50% by 2010, when progress has been so slight and so slow on this over the preceding 6 years. The low figures are also inconsistent with the reality that more and more Kenyans are using LLINs, which suggests that there is something wrong with this indicator.

PSI suggests that 'Respondents probably understand the value of LLINs as a malaria prevention method; however LLIN or treated net is not 'common language' compared with bednets. In the 2007 Trac survey 85.9% of respondents identify bednets as a method of malaria prevention unprompted up from 64.1% in 2003. Also 86% of all respondents know that nets treated with insecticide prevent malaria more effectively than non-treated nets.'

Table 12: Percentage of household respondents that identify treated mosquito nets as a method of malaria prevention (PSI TRaC survey)

Year	%
2003	8%
2005	13%
2007	16%

In the 2002- 2005 log frame, an additional indicator was included.
% of adults who know that malaria is only transmitted through mosquitoes bites;

Table 13: Percentage of adults who know that malaria is only transmitted through mosquitoes bites; (PSI TRaC survey)

Year	%
2003	49%
2005	45%
2007	43%

Comment
The PCR reviewer suspects that these indicators, with their focus on malaria, ignore the fact that the major motivator for using LLINs is to stop 'nuisance biting' and get a good night's sleep, and it is not to prevent malaria.

PSI research suggests that the main driver of LLIN use is 'social norms', i.e. that people use an LLIN because they believe their neighbours and peers are doing so. If this is indeed the case, then ongoing free distribution will, of itself and over time, gradually make non-users more of a minority.

5.3. Output 3

Access to LLINS among vulnerable populations in endemic & epidemic malaria areas

This output carries 50% of the impact weighting, and has been scored 1, 'likely to be completely achieved'.

5.3.1. Indicator 1

Number of free LLINs distributed through ANC in endemic & epidemic malaria areas

Target: 2.4million (Apr 2009-March 31st 2010)

Over the course of the project from 2001-2010, the totals are as follows.

Table 15: Number of free LLINs distributed through ANC in endemic & epidemic malaria areas

Year	ITNs	Treatment kits
2002	530,502	251,987
2003	643,218	562,946
2004	1,191,070	700,002
2005	3,455,082	1,213,110
2006	3,374,552	1,555,360
2007	1,995,205	625,843
2008	2,788,342	931,403
2009	2,664,759	1,015,085
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5.3.2. Indicators used in previous logframes

- Number of Kenyan companies supplying and distributing Supanet under license from PSI. The choice of this indicator assumed that commercial distribution would become a thriving business, and that more than one company would want to be in it. In fact, the rise of mass free distribution has meant that just one company (Country Mattress) has been willing to take on the Supanet brand, which it did in 2004 and which it continues to market at the time of this PCR.

- Availability/access of the ITNs and treatment was measured in 2002-2005 as the Percentage of supermarkets and wholesalers stocking SM nets (Supanet) and PowerTab:

Table 16: PSI distribution survey on Supanet (nets):

Year	Supermarkets	Wholesalers
2003	42%	21%
2005	50%	20%

Table 17: PSI distribution survey on PowerTab (treatment):

Year	Supermarkets	Wholesalers
2003	53%	31%
2005	50%	20%

Number of subsidized social marketed LLINs distributed through rural retail outlets in endemic & epidemic malaria areas. Target 460,000Apr 2009 - March 31st 2010 .

PSI managed to distribute just under 500,000 LLINs through this channel in the 12 months to March 2010, which is slightly down on the previous year's total. As anticipated, with so many free LLINs now available, rural shop-keepers are increasingly reluctant to stock LLINs, even at a highly subsidised price.

5.3.3. Indicator 3

Number of insecticide treatment kits distributed through rural retail outlets in endemic & epidemic malarias and to Kenyan net manufactures

The target for the year to March 2010 was 860,000.

745,000 treatment kits have been distributed.

With the market now dominated by long-lasting nets, the future of re-treatment is uncertain, and numbers are likely to decline.

- KEMSA is responsible for the management of 10% of all clinics participating in clinic program. In 2008, this indicator, seeking to increase GOK capacity to implement ITN clinics program was included in the project.

KEMSA served 246 clinics out of 3100 clinics, and distributed 338,148 nets.

6. Standard Indicators

DFID Standard Indicator 5 is Number of insecticide treated bed nets distributed.

Since the first grant to PSI-Kenya in 2001, this project has distributed 17.4m ITNs and LLIns: (and 7.7m treatment kits). The breakdown is as follows:

- sold 5.5m subsidised bundled ITNs through commercial channels
- sold 7.2m subsidisied LLINs through commercial channels and GoK clinics
- distributed 4.7m LLINs free at GoK clinics

PSI have also provided

- Provided 2.8m insecticide treatment kits free to importers and manufacturers of untreated nets, to bundle with them
- sold 4.9mstand-alone treatments kits through commercial channels

7. Assumptions

Impact on all cause child mortality reduced with ITN use as described in Cochrane Review. This assumption has been borne out, with increased use of ITNs and LLINs coinciding with a visible decline in malaria in children.

Mosquitoes do not become resistant to insecticide used on nets. No sign of this – yet.

Mosquito biting habits do not change. No sign of this - yet

Health workers integrate free net distribution into daily ANC and EPI activities. This has happened and on the whole appears to work well, though we do not have any monitoring data.

Determinants of ITN use are amenable to communication interventions. It is not possible to say whether this has been borne out. The PCR reviewer suspects that the main behaviours are not very amenable to BCC – rather, it is the fact that their neighbours have and use an ITN which persuades them to get one and use it – the 'social norms' identified as a determinant in the PSI research are not amenable to communications, because they are 'social' in origin, not based on knowledge or information.

The evaluation tables in the TRaC surveys will provide insight on whether the communication activities had impact on the behaviours. Given the comments on the assumption immediately above this one, it would be interesting to test this assumption

Demand for subsidized LLINs in rural areas will begin to decrease due to increased availability of free LLINs. This was a pretty safe assumption.

Decreasing demand of re-treatment due to increased availability of LLINs. This has definitely been borne out by events. The new technology is so much better than the old treatment one that the latter cannot possibly compete.

8. Attribution

The achievement of the purpose has been largely due to the achievement of Output 3 - the improved access to ITNs and now LLINs. This contributed 50% of the weighted impact.

Outputs 1 and 2 seem to have had less to do with the achievement of the purpose.

9. Risks

9.1. Funding

Due to the failure of recent Global Fund applications, there is a large gap in the current plans for the routine distribution of LLINs. The over-arching recommendation of the 2008 OPR was 'whatever else happens, keep the routine distribution at ANC and EPI going', and that is now threatened by the lack of forward funding and procurement of LLINs.

9.2. Mass distribution versus Targeting

We suspect that cost/DALY calculations would show that getting LLINs into the hands of those in the most malarial sub-districts (bordering Lake Victoria) is more cost-effective than spreading them evenly across all malarial districts; and that routine distribution at ANC and EPI is more cost-effective than mass distribution. There is a risk that an even spread and mass distribution of nets will be preferred because they are more attractive to politicians, even when there is not enough money to achieve either.

There is also a risk that the new WHO 'target', of getting one LLIN for every two people in malarial areas, will drive the programme towards incomplete mass distribution, when targeted distribution would be a more rational objective.

The ITN Framework was updated in August 2008, after the last OPR, but it has not been updated since. DFID should encourage DOMC to update the ITN framework and discuss it with stakeholders, as it is the best basis for resource allocation.

DFID should also encourage WHO to address with DOMC the specific question 'if there are not enough LLINs in Kenya to do routine distribution and mass distribution, what is the cost/DALY of different options for using the LLINs which are available?'

10. Logframe

DFID has agreed to fund a further five years of this programme, and PSI has developed a new logframe for Feb 2010 to March 2015. The following comments apply to this new logframe.

The indicators really need attention. The goal indicators should include other, more readily and frequently available (and understandable) measures of malaria morbidity and mortality. The national malaria M&E plan includes ten such indicators. On the first page of its proposal PSI also uses a number of indicators to show the success of previous interventions.

That 'distribution continues as per ITN framework' should not be an assumption of Output 2, it should be a verifiable indicator of the performance of Output 4, which PSI management should monitor on a monthly basis.

It is essential that PSI (and DOMC) start collecting and analysing data on routine distribution - at the time of this PCR, neither agency could say with any confidence who is and who is not getting the LLINs distributed at ANC and EPI. If that continues, then Output 4 and its 40% contribution and £26m of expenditure will go largely unmonitored.

The fact that people have been trained is a record of activity, not an indicator of Output 3 'strengthened 'capacity' (the extensive literature on doing and measuring capacity-building was drawn to PSI's attention in the 2008 OPR).

It is unwise to rely for so many of the baseline indicators on data which has not yet been collected, especially when some are variables which have never been collected before and may prove unreliable. Better to use at least some indicators which are known to be reliable and for which there is already trend data from PSI's own TRaC or KDHS.

The estimated share of inputs needs revising. The new logframe attributes to DFID 92% of Output 1 and 93% of Outputs 2 and 4, and 0% of Output 3. The government share of all four outputs is zero.

Monitoring is part of regular management, not a research exercise, and so it is unwise to rely so heavily on the Malaria Indicator Survey, which is only done every two years. More frequent 'dipstick' surveys may not be nationally representative, but they will give PSI managers (and DFID and its OPR consultants) early indications that the programming effort is or is not achieving the intended results.

Most managers also make use of comparative data, such as that noted in the 2008 OPR, that there are wide variations in the ratio of LLINs distributed per district and the estimated number of pregnant women.

11. Score

The purpose level score for this programme is 1, 'likely to be completely achieved'.

This has to be one of the most successful health projects funded by DFID, with clear and measurable improvements in the health of significant numbers of Kenyans, many of them poor, which can be directly attributed to PSI's programme and the funding from DFID over the past nine years.

PSI itself has done a great job, thanks to several years of hard work, good judgements, persistence and flexibility. DOMC is one of the most effective divisions in the two ministries involved with health, and DFID can also take some credit for this being the case, having funded a dedicated WHO Malaria adviser.

Output 1: Increased opportunity of vulnerable groups to sleep under ITNs (Vulnerable groups are children under five and pregnant women, in malarial areas)

Impact weighting - 25% . Score 1 (likely to be completely achieved).

Justification - the focus of PSI's work has been to get LLINs into the hands of the most vulnerable. By switching from paid to free LLINs and by putting so much effort into making sure that the LLINs are available at every ANC and EPI clinic, the project has achieved this output.

Output 2: Increased ability of vulnerable groups to sleep under ITNs (Vulnerable groups are children under five and pregnant women).

Impact weighting - 25%. Score: 2 (likely to be largely achieved)

Justification - the PCR reviewer suspects that these indicators do not reflect the reality, that the major motivator for using LLINs is to stop 'nuisance biting', not to prevent malaria.

Output 3: Access to LLINS among vulnerable populations in endemic and epidemic malaria areas.

Impact weighting - 50%. Score: 1 (likely to be completely achieved)

Justification - this project has more than exceeded its targets for LLIN distribution.

12. Knowledge Sharing and Evidence

12.1. Working with Partners

12.1.1. Collaboration between PSI and government

PSI shifted from being remote from government, some would say stand-offish; to being close to government. Almost all stakeholders praised PSI for this shift, and there is no doubt that without it, the programme would not have reached the scale and coverage that it has. This should be a major lesson for PSI globally, relating not only to its work on malaria.

12.1.2. Separate DFID support for WHO

DFID was wise to split its support to DOMC between PSI, for programming, and WHO, for technical advice. This played to the strengths of both agencies. In some other countries, DFID has combined both programme and advice in a single programme, which in this reviewer's opinion is not as effective.

12.1.3. The contribution of KEMRI

During the review, some stakeholders expressed the view that this programme would not have been so successful if Kenya did not have a strong malaria research programme in the national institute of medical research, KEMRI. Others were less sure; and one or two were confident that KEMRI's malaria research had nothing to do with the LLIN programme, and that its success has been due to DOMC leadership, DFID support and PSI's management and flexibility.

The PCR consultant feels unable to form a clear view on what contribution KEMRI has made, but offers three observations:

- Evidence from other countries such as Malawi or Nigeria, and even from neighbours such as Tanzania and Uganda, can always be challenged or dismissed as 'not applicable to Kenya'. Being able to present scientific data about malaria and LLINs in Kenya, rather than data from another country, does seem to have strengthened the impact this evidence has had on Kenyan policy-makers and politicians.
- Almost all stakeholders said that KEMRI has a deserved reputation for doing rigorous research of international quality. There have been few instances of policy-makers or politicians rejecting KEMRI's research findings, or DOMC's policies based on the evidence KEMRI has provided.
- Lastly, having strong and independent researchers in KEMRI and, as a result, the presence in many Kenyan meetings of world-class malaria researchers, has 'raised the game' for everyone, ensuring a high standard of discussion and evidence-based decision-making. This has probably had more impact on the DFID-funded WHO support than on the LLIN programme,

12.1.4. ITNs and LLINs lend themselves to donor funding

Nets are a very sensible thing for a donor to spend its money on in Kenya - they work; they are tangible; British and Kenyan politicians are supportive; they do not require a strong health system, just effective distribution; and their impact can be pretty equitable, as it has been in this case.

These characteristics do not always feature high on the list of the criteria when DFID is designing new programmes, but they should.

12.1.5. Monitoring has been neglected in favour of research

DFID and PSI have had more than one reminder that it is more important to monitor the basics of the programme, such as who is and who is not getting the nets, than to conduct sophisticated research. The first reminder was when an independent researcher (Cohen) pointed out that poorer women were not buying the subsidised ITNs at clinics. The second is now, at the end of nearly 9 years of funding, when neither PSI nor DFID can say with any confidence how many women did or did not get a free LLIN at an ANC or EPI clinic in 2009. There is little evidence to suggest that the distribution is not being done properly, but the absence of verification is a reflection of poor monitoring. It also poses a political risk.

12.1.6. Recommendations

DFID has committed more than half of all its health spending in Kenya to malaria control, most of it to LLINs. Given the success of this, DFID should reflect on whether similar support to, say, contraceptive commodities, might not be the most effective way of spending the other half.

12.2. Best Practice

12.2.1. Distribution and Demand

PSI's main strengths, which come from social marketing, are; an effective large-scale distribution capability (supply), and a focus on behaviour change by ordinary people (demand). In this programme these two strengths were applied first to traditional social marketing of paid-for products through retail shops, and then to free distribution through government clinics. The success of the latter shows that the same strengths - a focus on consumers, and tightly managed efficient distribution - are just as useful in free government programmes as they are in traditional social marketing.

12.2.2. Technological Advances

This form of malaria prevention has been transformed by the long-lasting technology. The original approach, which required ordinary people to don plastic gloves and dip their nets, proved to be an uphill struggle to get above 25% re-treatment rates. The lesson (which might be applicable in the future to technologies such as vaginal microbicides or malaria RDTs) is that consumer reluctance to adopt new practices should be taken very seriously - and is a good justification for serious funding of R&D to improve the product itself, provided that such improvements are really feasible. In this case, they were already on the horizon. Donor commitment to procure LLINs proved to be a enough incentive to Sumitomo and Verstergaard Frandsen to invest and scale up.

12.2.3. Competition

On the same topic, everyone has benefited from there being competition in the LLIN market (even though VF has 75% of the market). If there had been only one supplier of this improved technology, prices may well have been higher and volumes might well have been lower.

12.2.4. Recommendations

DFID should make more use of agencies such as PSI in programmes which do not have an obvious social marketing focus.

12.3. Project Management

12.3.1. The impact of DFID processes and systems on project performance

PSI has received no less than 8 separate grants for DFID for this programme. On at least two occasions PSI has had to fund the programme from its own resources, when there was a gap between two DFID grants. This has not only damaged the programme, and hence impacted the lives of potential beneficiaries who have missed-out, but it has also wasted an enormous amount of DFID and PSI time in endless crisis-driven negotiation. It has also damaged the UK's reputation as a 'reliable partner'. We understand that many of the problems with the continuity of funding have been due to the ebb and flow of UK-Kenyan relations.

12.3.2. Issues in the application or management of procurement processes.

The original decision to make an accountable grant to PSI was criticised by another firm which was expecting (with some justification) that this programme would be competitively tendered. The fact that the funding did take the form of an accountable grant has in fact contributed to its success, but this has been largely due to the flexibility which PSI has shown in adapting its approach from social marketing to supporting government. In some other countries, DFID has continued to support variations of social marketing, such as the voucher programme in Tanzania, despite some evidence that these often fail to achieve the coverage needed to have large-scale health impact.

12.3.3. Reference to the performance of suppliers, including consultants

We have already noted that PSI has done a really good job.

12.3.4. Recommendation

DFID and the FCO should together agree on some criteria to enable consistent funding of programme such as this in the future, if and when UK-Kenyan relations deteriorate again.

13. Other Comments

13.1. Division of Malaria Control (DOMC)

DFID and PSI have been lucky that the DOMC, has been one of the most forward-looking and best-managed sections of the MOH. When DFID and the DOMC decided to ask PSI to support a very weak department, KEMSA, the results were disappointing to all, and frustrating for PSI. The current distribution continues to rely on a health facility workforce which we know is over-loaded. Indeed, there does not appear to have been any action on the 2008 OPR recommendation that 'PSI and DOMC should explore ways of reducing the workload of facility staff presented by LLIN distribution'. Other than a funding shortfall and a resulting absence of nets (which now seems likely, given the failure of Kenya's Round 9 application to the Global Fund), excessive workload at facilities is still the biggest risk to the programme.

13.2. Output-to-Purpose logic of BCC.

The Output-to-Purpose logic relies on one assumption, that 'Determinants of ITN use are amenable to communication interventions'. Establishing a causal linkage between BCC and behaviour is notoriously difficult, and PSI's 2007 TRaC survey did not capture the data needed to determine if net use was related to exposure to BCC.

In 2008 PSI did research which identified the determinants of ITN usage, and these will be tested in the 2010 MIS survey to see if net use (as opposed to net ownership) is affected by BCC.

It is probable that the 2010 survey will show some association between net-use and exposure to communications, but DFID and PSI should pay close attention to the strength of the association; and to whether the BCC has the same impact on households which have received a free net as part of a mass distribution, as it does on those who have received a (DFID-funded) net as part of a visit to ANC or EPI clinic. The PCR consultant suspects (but has no evidence) that increased LLIN use is probably driven by some simple factors inherent in the current programme:

- The new LLINs are a much better product than the old untreated nets;
- They do not need re-treatment (which most net-users in most countries proved very reluctant to do, despite extensive BCC to encourage them).
- Most of the LLINs are free; and those that are not free are very cheap

Most importantly, they are given to women at an opportune time (when they get pregnant and come to the ANC clinic, or when they bring their infants for immunisation). The timing of this is ideal, and it also gives an opportunity for health workers to give even some encouragement or advice about use while handing over the LLIN. Ten words from a health worker face-to-face may prove to be more effective than any amount of BCC.

As part of this PCR, the consultant visited Nyanza and saw two BCC projects which are designed to increase the uptake and use of LLINs.

One was part of a national programme run by the Scouts, under which girl and boy scouts visit homes in their neighbourhood and advise parents on how to hang LLINs. The young people and their adult leaders were very keen, and using a national organisation does have the advantage of scale so that high levels of coverage should be possible. But the basic premise of this behaviour change communication did not seem very sound, because nowhere in the world do older people like taking advice from the young - and some of the scouts I met were very young.

The second was a CBO founded by Community Health Workers, who had organised a barazza with the sub-district chief. This seemed to have a more sound basis in the research evidence, as we know that a major driver of net-use is social norms, and much of the discussion in the group which I attended was devoted to almost everyone else persuading one 'doubting Thomas' to allow his two wives to use the LLINs they had been given. But it seemed unlikely that PSI would be able to achieve anything like the level of coverage needed to have a measurable impact on net-use. It is very cheap (Just KShs 14,000/month) but if coverage is minimal that is still not a cost-effective use of donor money. (Organising such CBOs also seemed an ineffective use of PSI's field-staff, who had done a full-scale tendering process to select a few CBOs in just 3 of 21 districts).

14. Sustainability

LLINs are not likely to be sustainable now or in the foreseeable future because:

- if they were not free or heavily subsidised, most poor people would not buy them;
- if they were not delivered to facilities by PSI, they would pile up in central or district stores and never reach the facilities;
- the health impact of malaria prevention is not sustained beyond the use of the LLIN.

DFID should therefore continue to fund LLINs in Kenya.

15. Follow-up of recommendations in 2008 OPR

15.1. DFID should continue to support PSI's LLIN programme for another 3-5 years, and in particular to ensure that the current distribution through facilities is maintained.

This has happened, with DFID committing to five more years of funding.

15.2. For this funding, PSI should work with DOMC to develop a logframe in which the outputs and indicators fit those of the DOMC's own plans.

This has been partly done, in that the new logframe uses KNMP indicators. But as noted above, the logframe still has several weaknesses.

15.3. PSI's collaboration with KEMSA should be re-considered in the light of KEMSA's acknowledged weakness. PSI's logframe should include an output 'close and effective collaboration with government'.

Neither DFID nor DOMC are expecting KEMSA to be involved in the foreseeable future (though KEMSA itself, which has a new management team, is keen to be involved, because it has spare storage and distribution capacity).

15.4. PSI and DOMC should explore ways of reducing the workload of facility staff presented by LLIN distribution. DFID should try to ensure that HSSF prioritises support to these front-line workers.

This reviewer did not hear or see any evidence that PSI or DOMC had done anything on this recommendation.

15.5. PSI should consider not doing a malaria TRaC survey in 2009, as it would be better to use the funds and skills to support DOMC's broader information needs. PSI took this advice, and the DFID funds which would have gone to the 2009 TRaC are now going to support the Malaria Indicator Survey. This has been put back to 2010, and there is a risk that the survey will be over-burdened by too many separate interests fighting to have 'their' questions included; and by 100% rather than sample blood testing.

15.6. PSI should cost its distribution system, so that DOMC and donors can identify the costs of different components. WHO has done a costing analysis of the Kenya

Insecticide Treated Bed Net programme, which is to be welcomed. But it does not give the DOMC or DFID the information they need to assess whether components of PSI's distribution could be done more cheaply by other agencies.

15.7. PSI should continue with its rural social marketing for another two years, and then let DOMC decide whether it wishes it to continue. This has happened, and PSI continues to market LLINs to rural shops. (Two shop-keepers this reviewer spoke to in rural Nyanza both said that they were selling fewer nets, and another said she had stopped stocking nets).

15.8. PSI should help to build the capacity of research agencies by contracting out more of the work it currently does in-house. PSI's research manager told this reviewer that this was happening.

15.9. PSI should undertake its BCC research in close collaboration with government and other agencies, and take the lead in creating a health communications monitoring survey. PSI is doing the former, and working closely with government; there was no word of the latter.

15.10. PSI should make time and space for its senior managers to learn more about how best deliver capacity-building assistance to government. PSI staff have had some training in this, though it does not feature in the logframe or in the discussions I had with PSI managers.

15.11. *PSI should let go of the* urban *Supanet* as soon as possible. PSI has done this.

15.12. To complement the above, DFID (through WHO) should support DOMC to make its section of the AOP provide a better sense of DOMC´s (a) intended priorities, (b) performance indicators and (c) main resource gaps for the following year. The director of DOMC told this reviewer that this had happened to some extent, although the split into the two health ministries had made it more difficult.

15.13. DFID should not enter the ACT distribution business, as there are enough other agencies active in this area. DFID should continue to fund operational research on this topic. DFID has not committed significant funds to ACTs.

16. Recommendations

1. Monitoring uptake and use of LLINs
DFID should make sure PSI's new 2010-2015 programme does, as planned, monitor whether all women who come to the clinics are actually getting an LLIN; and how many of those who do who get them are using or not using them as intended. Looking back at the 9 years of DFID funding, the one thing which would have increased the impact by 2010 is if the decision to shift from clinics charging for LLINs to giving them away for free had been taken sooner. Proper monitoring of who was and was not buying the subsidised LLINs at clinics would have alerted DFID and PSI to the fact that not all poorer women were buying LLINs, even at the subsidised price.

2. More consistent funding
More consistent funding from DFID would have helped the programme (there have been no less than 8 extensions and twice PSI has had to rely on its own funds to bridge funding gaps). This problem seems to have been due more to ups-and-downs

in UK-Kenyan relations than to factors over which DFID had much control. The Department for International Development (DFID) and the FCO should together agree on some criteria to enable consistent funding of programme such as this in the future, in the event that UK-Kenyan relations were to deteriorate again.

3. Cost-effectiveness of free distribution
With hindsight, PSI could perhaps have put greater effort and resource into those districts in the malarial zones which have the highest malaria prevalence (and could do this in the next phase). DFID should encourage WHO to address with DOMC the specific question 'if there are not enough LLINs in Kenya to do routine distribution and mass distribution, what is the cost/DALY of different options for using the LLINs which are available?'

4. Be realistic about capacity building
DFID and DOMC could have avoided the distraction of trying to get 10% of LLINs distributed to facilities by KEMSA, if they had taken a more robust and critical line with that organisation, which most stakeholders felt was unsuited to taking on such additional tasks at that time.

5. ITN Framework
DFID should encourage DOMC to update the ITN framework and discuss it with stakeholders.

6. 2010 - 2015 Logframe
DFID has agreed to fund a further five years of this programme, and PSI has done a new logframe for Feb 2010 to March 2015. The indicators really need attention. That 'distribution continues as per ITN framework' should not be an assumption of Output 2, it should be a verifiable indicator of the performance of Output 4. It is essential that PSI (and DOMC) start collecting and analysing data on routine distribution. The fact that people have been trained is a record of activity, not an indicator. It is unwise to rely for so many of the baseline indicators on data which has not yet been collected, especially when some are variables which have never been collected before and may prove unreliable. It is better to use at least some indicators which are known to be reliable and for which there is already trend data from PSI's own TRaC or KDHS. The estimated share of inputs needs revising. It is unwise to rely so much on the Malaria Indicator Survey, which is only done every two years. More frequent 'dipstick' surveys may not be nationally representative, but they will give PSI managers (and DFID and its OPR consultants) early indications that the programming effort is or is not achieving the intended results. PSI research suggests that the main driver of LLINs use is 'social norms', i.e. that people use an LLIN because they believe their neighbours and peers are doing so. If this is indeed the case, then that is what should be monitored, not the 'logically deeper' question of how people assess risk.

7. Funding health commodities and their efficient distribution really works
DFID has committed more than half of all its health spending in Kenya to malaria, most of it to LLINs. Given the success of this, DFID should reflect on whether similar support to, say, contraceptive commodities, might not be the most effective way of spending the other half.

8. Do not stop the routine distribution of LLINs at MOH clinics
DFID should continue to fund the purchase and distribution of LLINs in Kenya

9. If supplies of LLINs in Kenya are limited, how is it best to distribute them to achieve maximum impact?

DFID should also encourage WHO to address with DOMC the specific question 'if there are not enough LLINs in Kenya to do routine distribution and mass distribution, what is the cost/DALY of different options for using the LLINs which are available?'

Annexes

Annex 1. Terms of Reference

Project Completion Review of Social Marketing of Bed nets programme

Objective of the consultancy
The objectives of this consultancy are to:

- conduct a Project Completion Review (PCR) of DFID's support to bed nets programme against the log frame and complete a DFID PCR
- Identify lessons learnt from the programme overall which may of benefit to GoK, DFID, partners and which can inform future programming.

Recipient
DFID Kenya and Somalia

Scope of Work
The consultant will be expected to determine whether the project has achieved its purpose and comment on efficiency and effectiveness of the implementation model.

1) Read through the Project Memorandum, the bi-annual reports produced by PSI and previous Outputs to Purpose reviews. The consultant will pay particular attention to the recommendations made at the end of the last review.
2) Refer to national policy documents such as the National Health Strategic plans, Annual Operation plans of the Health Sector, Joint Health Sector Review, National Malaria strategy and ITN implementation Framework documents.
3) Evaluate the progress made on each output and assess the likelihood that the project purpose and outputs will have been achieved.
4) Assess if there are any lessons or best practices that should be documented and disseminated from this project. Outline any lessons that have been identified.
5) Make recommendations on future funding and implementation / ITN delivery.

Methodology
a) desk review of relevant documentation, to inform and advise DFID health sector programme and to assess the overall performance of the programme. The consultant will review documents including the Project Memorandum, new project proposal, the bi-annual and annual reports produced by PSI and others, and previous Output to Purpose Reviews (OPRs).
b) To interview key programme staff within Ministry of Health, WHO and key partners to assess programme performance and to learn lessons.
c) carry out field visits; locations will be selected in consultation with MOH and PSI;
d) Presentation of findings and conclusions to DFID, MoH, PSI and others.

Reporting
The consultant will deliver written and oral briefs. The oral de-brief will be delivered to PSI, DFID, DoMC and partners before departure. The written report will include the DFID PCR format as an annex to a narrative report.

Outputs
The consultants will be responsible for preparing PCR report in DFID format, accompanied by a brief narrative report.

The Health Adviser should receive the draft OPR reports in electronic form by end April 2010. Final reports will be produced within a week of receiving comments.

Timing
The consultancy for the PCR is proposed for March 2010. The assignment is expected to be up to 18 working days including in-country work. The expected milestones are as follows:

- First draft within 1 week of departure
- Comments on draft report from DFID/MOH/PSI within 3 weeks of receiving the first draft and submission of final report within 1 week of receiving comments.

DFID Coordination
The consultant will report to the DFID Health Advisor and liaise with PSI for all in-country arrangements.

Consultancy Skills and Requirements
It is expected that this will be undertaken by a consultant with experience of social marketing, public health malaria experience in the areas of ITNs, and experience of health sector reform / SWAP development processes. Experience in OPRs and DFID programmes is desirable.

Management Arrangements
The consultants, with support from PSI, will be responsible for all their in-country arrangements

Background
The Social Marketing of Insecticide Treated Bednets (ITNs) started in August 2001 and will end in March 2010. The total value of the project is £71.6 million and it is expected to deliver 17 million ITNs by end of project period. Population Services International (PSI) was awarded an accountable grant to implement the Social Marketing of ITNs project.

The purpose of the project is to increase the use of ITNs among pregnant women and children under 5 and the goal is to reduce morbidity and mortality from malaria. Malaria is one of the leading causes of mortality and morbidity in Kenya. Over 20 million Kenyans are exposed to malaria plus an additional 8.5 million during epidemics. It accounts for 30% of all outpatients, 15% of reported deaths and annually kills 34,000 children under-5 years - a further 145,000 develop severe medical complications. It is also a major contributor to maternal mortality.

The project has been extended to end March 2010 following post election violence in 2007/08 and the delaying in approving the new health programme. The necessity to extend is due to the need to secure gains already made and maintain the trajectory of increasing net ownership and use with the resultant reduction in malaria mortality and morbidity.

Concurrent DFID funding has been provided to support implementation of the National Malaria Strategy via the WHO Kenya Office (2002-2009 at a cost of 16 million). WHO has been responsible for supporting an effective policy environment for malaria control in Kenya. This includes the development of the ITN

Implementation framework, which includes a transitional plan to develop government capacity to take over ITN delivery.

A new health programme was approved late December 2009. The new programme will adopt a twin-track approach of continuing to fund public health programme outside government such as through PSI, while at the same time providing support to the emerging SWAP. The SWAP building process is progressing slowly, suffered a set back in following post election violence but SWAP building process is steadily again gaining momentum. The new support will provide support for ITN albeit at a lower funding level.

DFID Kenya and Somalia
Jan 2010

Annex 2. People Met

Daun Fest	PSI Kenya	Country Director
Veronica Musembi	PSI Kenya	Dep Director PSI Kenya
Paul Kuria	PSI Kenya	Research and Metrics Dep Director
Mbogo Bunyi	PSI Kenya	MCH Dep Director
Sylvia Wamuhu	PSI Kenya	Sales Dep Director
Dorcas O Wafula	PSI Kenya	Supply Chain Director
Mark Rotich	DFID	Head DfID Kenya
Dr. Willis Akhwale	MOPHS	Head Department of Disease Prevention and Control
Dr. Elizabeth Juma	DOMC	Head Division of Malaria Control
Dr. Rebecca Kiptui	DOMC	Focal Person Vector Control
John Moro	DOMC	Focal person ACSM
Dr Akpaka Kalu	WHO	Malaria Adviser
Edward Mwangi	KENNAM	CEO
Dr John Munyu	KEMSA	CEO
Dr. Kaendi Munguti	USAID/PMI	Malaria Adviser
Dr Kioko	MOPHS	PMO Nyanza
Various	CBO, Siaya	Sub-district chief & volunteer CHWs
Various	Kenya Scouts	Scouts and leaders

Annex 3. Indicators in ARIES

From: Mark Rotich [M-Rotich@dfid.gov.uk]
Sent: 17 March 2010 14:26
To: Mackay, Bruce (HLSP)
Cc: Paul Kuria; james.mcintyrebrown@hlsp.co.ke; Cooper, Matthew
Subject: RE: Indicators in ARIES

Bruce

The PCR may include more indicators than those in the submitted log frame. I will make a note on the progression of log frames and reasons for variance fro our managers.

Please use option B. The additional line will provide details not in the first line but keeps it as one indicator and not 2.

Regards
Mark

-----Original Message-----
From: Mackay, Bruce (HLSP) [mailto:Bruce.Mackay@hlsp.org]
Sent: 17 March 2010 17:01
To: Mark Rotich
Cc: Paul Kuria; james.mcintyrebrown@hlsp.co.ke; Cooper, Matthew
Subject: Indicators in ARIES

Mark,

Further to your request for me to capture significant OVIs from the previous logframes, Paul and I have been over these today, and we have one or two queries.

This email is about the first, there may be more!

Does it matter if the PCR report includes more (or different) indicators than there were in the logframe which was submitted.

For example, in the curent extension logframe (which you have said we should use for the PCR ARIES) there are two Purpose OVIs, the first of which is 'Percentage children under 5 years old in intervention areas who slept under an ITN the previous night'. The only data for this is
KDHS2003 and KDHS 2008.

In the previous PSI logframes, this OVI is slightly different 'under any net' (because PSI tried but failed to distinguish a 'treated' from an 'untreated net' in the earlier years. DHS just recorded the response and moved on to the next question!). For this we have data from the TRaC survey in 2003, 2005 and 2007.

We could:
A. Ignore previous logframe OVIs, and just enter current logframe ones (ie the KDHS), and report previous related OVIs (such as 'any net') in the narrative only.
B. Add the 'under any net' figures as an additional line in the same cell, as in the attached sample.
C. Click on the little + sign to open up a 'new indicator' box, and enter the previous OVI 'under any net' as a separate indicator, and move the text for 'pregnant women' down to OVI 3 & 4 (i.e pregnant women under an ITN' would be 3, 'pregnant women under any net' would be OVI 4). But we would not want to do this if it meant that ARIES thinks this is the second OVI in the current logframe, and put the 'under 5s under any net' figures against the second OVI, which is about pregnant women.

Bruce

-----Original Message-----
From: Mark Rotich [mailto:M-Rotich@dfid.gov.uk]
Sent: 11 March 2010 13:25
To: Mackay, Bruce (HLSP)
Subject: ITN Logframe Extension April 09 to Feb 10 DF June 9 2009 formatted July 2

<<ITN Logframe Extension April 09 to Feb 10 DF June 9 2009 formatted July 2_P1.xls>>
Bruce

This is the final extension log frame that should be used in conjunction with the other log frames. PSI should supply you with the agreed log frame prior to the extension period.

Regards
Mark

Document Number: 2217085
Author: mark rotich
Title: ITN Logframe Extension April 09 to Feb 10 DF June 9 2009 formatted July 2 Date of Original Document: 27/07/2009
Attachment: ITN Logframe Extension April 09 to Feb 10 DF June 9 2009 formatted July 2_P1.xls

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