



USAID | DELIVER PROJECT

FROM THE AMERICAN PEOPLE

Liberia: Distribution of 430,000 PMI-Funded Insecticide-Treated Nets to Households in Lofa, Nimba, and Grand Bassa Counties



MAY 2009

This publication was produced for review by the U.S. Agency for International Development. It was prepared by the USAID | DELIVER PROJECT, Task Order 3.

Liberia: Distribution of 430,000 PMI-Funded Insecticide-Treated Nets to Households in Lofa, Nimba, and Grand Bassa Counties

USAID | DELIVER PROJECT, Task Order 3

The USAID | DELIVER PROJECT, Task Order 3, is funded by the U.S. Agency for International Development (USAID) under contract no. GPO-I-03-06-00007-00, beginning April 6, 2007. Task Order 3 is implemented by John Snow, Inc., in collaboration with PATH; Crown Agents Consultancy, Inc.; Abt Associates, Fuel Logistics Group (Pty) Ltd.; UPS Supply Chain Solutions; Family Health International; The Manoff Group; 3i Infotech; Center for International Health and Development (Boston University School of Public Health); and U.S. Pharmacopeia (USP). Task Order 3 supports USAID's implementation of malaria prevention and treatment programs by procuring, managing, and delivering high-quality, safe, and effective malaria commodities; providing on-the-ground logistics capacity, technical assistance, and pharmaceutical management expertise; and offering technical leadership to strengthen the global supply, demand, and financing of malaria commodities.

Recommended Citation

USAID | DELIVER PROJECT, Task Order 3. 2009. *Liberia: Distribution of 430,000 PMI-funded Insecticide-treated Nets to Households in Lofa, Nimba, and Grand Bassa Counties*. Arlington, Va.: USAID | DELIVER PROJECT, Task Order 3.

Abstract

A total of 430,000 LLIN were shipped to Liberia and distributed in Lofa, Nimba, and Grand Bassa Counties of Liberia from May 13 to June 9, 2009. The net purchase and distribution operations were funded through USAID, as support from the American people to the people of Liberia.

The National Malaria Control Program (NMCP) led several planning processes that took place in the months preceding the distribution period. NMCP personnel, the County Health Teams (CHT) of the three counties, EQUIP Liberia, and Merlin were involved in the distribution management. The USAID | DELIVER PROJECT resident advisor provided the support during the planning stage, and the project provided financial and logistical support for the implementation stage.

Cover photo: Workers loading a truck with bales of LLIN bound for a district in Lofa, Nimba, or Grand Bassa County, Liberia in May 2009.

USAID | DELIVER PROJECT

John Snow, Inc.
1616 Fort Myer Drive, 11th Floor
Arlington, VA 22209 USA
Phone: 703-528-7474
Fax: 703-528-7480
E-mail: askdeliver@jsi.com
Internet: deliver.jsi.com

Contents

- Acronyms.....7
- Acknowledgements 9
- Distribution Summary..... 11
- Distribution Activities..... 15
 - Background 15
 - Initial Planning Activities..... 15
 - County-Level Plans and Budgets..... 16
 - Transition to a Short-Term Team..... 16
 - Training the County Team 16
 - Identification of Local Printers and Contracting for Production of Information Education and Communication/ Behavior Change Communication (IEC/BCC) Materials for Use in LN Distribution Campaign 17
 - Local Transporters and Storage Facilities..... 17
 - Logistics Management Information System (LMIS) and Security of LNs During Distribution 17
 - Mobilization of Leaders and Communities 18
 - Post-Distribution Review Meeting..... 18
- Achievements & Challenges 19
 - Achievements of the Distribution Campaign..... 19
 - The Challenges Faced 19
 - Planning Process..... 19
 - Logistics—Storage and Distribution of LNs..... 20
 - Insufficient Number of LNs and Differing Allocation Strategies 20
 - Distribution Strategy..... 21
 - Planning 21
 - Fund Management..... 21
 - Mobilization and Awareness Raising 21
 - Implementation and Monitoring..... 21
- Conclusion..... 23
- Figures**
 - I. Mr. Cooper addresses the students at the morning assembly..... 15
- Tables**
 - 1. Lofa County Distribution Summary..... 12
 - 2. Grand Bassa County Distribution Summary..... 12
 - 3. Nimba County Distribution Summary 13

Acronyms

ANC	Antenatal clinic
BCC	Behavior Change Communication
CHO	County Health Officer
CHT	County Health Team
CHV	County Health Volunteer
GF	Global Fund
IEC	Information Education and Communication
IMC	International Medical Corps
LMIS	Logistics management information system
LN	Long-lasting, insecticide-treated Net
MOHSW	Ministry of Health and Social Welfare
NGO	non-government organization
NMCP	National Malaria Control Program
OFM	Office of Financial Management
PMI	President's Malaria Initiative
USAID	U.S. Agency for International Development
UNICEF	United Nations Children's Fund
UNDP	United National Development Program
WHO	World Health Organization

Acknowledgements

The Minister of Health and Social Welfare (MOHSW) has reiterated the interest of reducing malaria in Liberia. To achieve this objective, the National Malaria Control Program (NMCP) of the ministry has led efforts to achieve universal coverage through the national distribution of long-lasting, insecticide-treated nets (LNs). Similarly, the County Health Teams (CHTs) in all of the counties where nets were distributed ensured a complete mobilization of all local partners, different county authorities, and health workers for a successful distribution exercise. Achievements during the distribution activities in Grand Bassa, Lofa, and Nimba counties are due to their combined leadership and efforts.

The nets were purchased and distributed with funds from the U.S. Agency for International Development through the USAID | DELIVER PROJECT. The President's Malaria Initiative (PMI) Advisors in Liberia were extremely engaged throughout the procurement, planning, and implementation stages, providing advice and promoting the vital role of the NMCP during every stage of the activity.

Distribution Summary

A total of 430,000 long-lasting, insecticide-treated nets (LNs) were delivered to Liberia in May 2009. The nets came in three different sizes: small¹ (126,950 pieces), medium² (236,250 pieces), and large³ (66,800 pieces). Each bale of small and medium sizes included 50 nets; each bale of large sizes included 25 nets.

All of the 430,000 nets were transported from Monrovia directly to the districts in the counties benefitting from the distribution exercise: Lofa, Nimba, and Grand Bassa. A waybill indicating the quantities of nets transported and the quantity of nets received per district and including the signature of the recipient receiving on behalf of the district and the date of delivery accompanied each net consignment.

With technical support from the National Malaria Control Program (NMCP), and financial and logistical support from NGOs and the project, the counties took responsibility for the nets at the district level for house-to-house distribution. The tables below indicate the number of nets delivered to the districts and the quantity reported by each County Distribution Coordinator (often the County Health Department Director) as distributed per district.

¹ 190x180x150 cm.

² 160X180X150 cm.

³ 1250X250X65 cm.

Table 1: Lofa County Distribution Summary

Districts	Population	Estimate # HH	Net Pack	# of small size nets	# of medium size nets	# of large size nets	Total Nets Delivered (Pieces)	Total Nets Distributed (Pieces)
Kolahun	50,297	10,059	Bales	121	247	170	22,650	22,625
			Pieces	6,050	12,350	4,250		
Voinjama	41,585	8,317	Bales	97	208	145	18,875	18,875
			Pieces	4,850	10,400	3,625		
Foya	72,863	14,573	Bales	181	359	232	32,800	32,800
			Pieces	9,050	17,950	5,800		
Salayea	23,450	4,690	Bales	49	116	90	10,500	7,400
			Pieces	2,450	5,800	2,250		
Zorzor	41,199	8,240	Bales	96	207	144	18,750	18,700
			Pieces	4,800	10,350	3,600		
Vahun	17,230	3,446	Bales	32	88	73	7,825	7,800
			Pieces	1,600	4,400	1,825		
Quadu	19,161	3,832	Bales	35	102	74	8,700	8,700
			Pieces	1,750	5,100	1,850		
	265,785	53,157		611	1,327	928	120,100	116,900
				30,550	66,350	23,200		

Table 1 indicates a balance of 3,200 nets. The Lofa County Health Department Director, Mr. Thomas Cooper, plans to have the balance nets placed in Antenatal Clinics (ANCs) in the county for distribution to pregnant women.

Table 2: Grand Bassa County Distribution Summary

Districts	Population	Estimate # HH	Net Pack	# of small size nets	# of medium size nets	# of large size nets	Total Nets Delivered (Pieces)	Total Nets Distributed (Pieces)
Commomn wealth	34,270	6,854	Bales	141	226	50	19,600	19,580
			Pieces	7,050	11,300	1,250		
D1	25,180	5,036	Bales	66	124	69	11,225	11,209
			Pieces	3,300	6,200	1,725		
D2	28,469	5,694	Bales	75	140	79	12,725	12,725
			Pieces	3,750	7,000	1,975		
D3	47,721	9,544	Bales	327	356	154	38,000	37,987
			Pieces	16,350	17,800	3,850		
D4	33,180	6,636	Bales	87	163	92	14,800	14,800
			Pieces	4,350	8,150	2,300		
Neekreen	32,058	6,412	Bales	112	200	88	17,800	17,095
			Pieces	5,600	10,000	2,200		
Owengrove	13,687	2,737	Bales	36	67	38	6,100	6,100
			Pieces	1,800	3,350	950		
St John	10,274	2,055	Bales	138	70	36	11,300	11,300
			Pieces	6,900	3,500	900		
	224,839	44,968		982	1,346	606	131,550	130,796
				49,100	67,300	15,150		

Grand Bassa County reported that 754 and 197 pieces of nets were returned to the county office in two different instances, respectively, as balances from the distribution exercises in different communities. In addition, a total of 150 nets (6 bales of 25 pieces per bale) were intercepted by the police and returned to the county. This results in a total of 1,101 nets at the County Health Team (CHT) level.

The County Health Department Director, Ms. Joyce Garblah, identified four health facilities, including the Liberia Government Hospital, Buchana, where the nets will be used.

Table 3: Nimba County Distribution Summary

Districts	Population	Estimate # HH	Net Pack	# of small size nets	# of medium size nets	# of large size nets	Total Nets Delivered (Pieces)	Total Nets Distributed (Pieces)
Saclepea	80,172	16,034	Bales	170	339	218	30,900	30,900
			Pieces	8,500	16,950	5,450		
Yarwin Mehnsosnoh	27,353	5,471	Bales	50	106	58	9,250	9,250
			Pieces	2,500	5,300	1,450		
Gbelay Geh	71,177	14,235	Bales	145	272	154	24,700	24,700
			Pieces	7,250	13,600	3,850		
Zorzoroe Geh	77,926	15,585	Bales	159	290	166	26,600	26,600
			Pieces	7,950	14,500	4,150		
Sanniquele	133,856	26,771	Bales	352	662	368	59,900	59,900
			Pieces	17,600	33,100	9,200		
Tappata	77,604	15,521	Bales	158	299	166	27,000	27,000
			Pieces	7,900	14,950	4,150		
	468,088	93,618	Bales	1,034	1,968	1,130	178,350	178,350
			Pieces	51,700	98,400	28,250		

In Nimba County, 1,136 nets were seized from a woman who was attempting to export the nets to a neighboring country by the Police and Border Guards in Loguato. The nets were kept in police custody for some time but have now been released to the Nimba County Health Team for redistribution.

It has been suggested that the Loguato community that helped to intercept the nets should benefit from the redistribution.

Distribution Activities

Background

The government of United States of America is committed to providing assistance to the people and government of Liberia in the fight against malaria. Therefore, Liberia is one of the countries benefitting from the President’s Malaria Initiative (PMI).

The USAID | DELIVER PROJECT, in the first PMI-supported net distribution in Liberia, implemented net distribution during January–March 2008, providing 197,000 insecticide-treated nets (ITNs). Most of the nets were distributed house-to-house in Bomi and Grand Cape Mount counties, and the rest were placed in ANC clinics in Gbarpolu, Grand Cape Mount, Bomi, and Montserrado counties

Initial Planning Activities

The second PMI-supported net distribution strategy included an early planning retreat at the Krystal Oceanview Hotel, with a team of NMCP personnel, led by the Deputy Manager, Mr. Tolbert Nyenswah. Also at the retreat were PMI staff from the Centers for Disease Control and Prevention (CDC) and USAID PMI advisors for Liberia; a CDC representative from Atlanta, Georgia, Dr. Kwame Asamoah; and the USAID | DELIVER PROJECT (the Project) resident logistics advisor.

Retreat participants shared ideas on the distribution strategy for the country. The Ministry strategy of house-to-house distribution was adopted, with a maximum of three nets allocated for each household. This retreat was one of several discussion sessions on net distribution held during the Project’s weekly meeting with PMI and NMCP.

Another step in the strategy development was conducting a planning exercise in each of the three counties. In each planning exercise (with the exception of Grand Bassa), a PMI advisor, the Project resident logistics advisor, and a representative from NMCP offered the necessary support and guidance to the counties in their distribution planning. County and district superintendents, district health officers, opinion leaders, religious leaders, and administrative authorities (for example, the police) participated in each of the planning sessions to ensure effective distribution and net security. In Lofa, a United Nations Mission in Liberia (UNMIL) representative attended the planning meeting.

Figure 1. Mr. Cooper addresses the students at the morning assembly.



In Nimba, the PMI advisor, Dr. Belay, held a meeting with the school authorities to emphasize to them the important role students can play, as well as their positive involvement, in ensuring effective net distribution and use.

In Lofa, Dr. Belay; Mr. Cooper, Lofa County Health Department Director; and the Project resident logistics advisor visited the Voinjama Multilateral High School, which has 1,187 students,

42 teachers, and 17 functional classrooms. At a meeting with the two vice-principals of the high school, Mr. Johnson Arku (vice-principal administration) and Mr. James Kabbah (vice-principal instruction), the school was informed of the objective of net distribution and proper use.

There were also meetings with the schoolteachers and seven members of the pupils' Health Club. The following day, Mr. Cooper returned to the school to start the advocacy work at the school assembly by addressing the students on the net distribution project.

County-Level Plans and Budgets

The resident logistics advisor developed a planning spreadsheet template that identified the various stages of activities and associated budget lines in the distribution exercise to assist counties in developing their individual plans and budgets. Each of the three counties adopted the template for planning purposes.

The counties used this template to develop plans and budgets for net distribution and submitted these plans and budgets to NMCP. The plans were adopted after review and minor revision by NMCP, PMI, and the Project.

Transition to a Short-Term Team

While the planning was taking place, the Liberia project resident logistics advisor fell ill and had to leave Liberia for medical attention before the counties received feedback on the plans and budgets they submitted. The Project sent three staff members from Washington to support office operations and net distribution activity. Unfortunately, there was no overlap or briefing between the resident logistics advisor and the short-term technical assistance team, so the staff members were not informed about the planning that had taken place before their arrival and the current status of activities. This lack of transition led to a number of misunderstandings and tension between the team and key partners, including NMCP and the CHTs. The NMCP and CHTs wanted to adhere to plans that were already in development, and the team felt pressure to act quickly as the nets were arriving in two weeks and the rainy season was beginning.

One issue that arose after the team arrived was whether the door-to-door distribution strategy should include a hang-up component. Both NMCP and the PMI advisor felt strongly that it should be part of the distribution, as hanging up the nets had been shown to improve acceptance and use. However, the distribution budget did not include a hang-up component and after calculating the costs of adding it, it was determined that there were insufficient funds to include this component. Instead, the Project purchased rope and nails for the County Health Volunteers (CHVs) to distribute along with the nets.

Given the need to distribute the LNs simultaneously in three counties, the Project developed collaborative agreements with three NGOs—Merlin in Grand Bassa, EQUIP in Nimba, and the International Medical Corps (IMC) in Lofa—to provide fund disbursement and logistical support. In each case, the NGO partners were told that each CHT was in the lead in the distribution exercise. However, one CHT reported that its partner NGO did not always respect this guidance.

Training the County Team

To ensure that everyone involved in the distribution had the required knowledge, a step-down training was undertaken. The counties identified a group of master trainers, who, in turn, would train others in their counties. These were the county health department directors, the district health officers, and the district supervisors. Five NMCP personnel conducted week-long training for these master trainers at the Sanniuellie City Hall, in Sanniuellie, Nimba County.

NMCP produced the training curriculum for house-to-house distribution of nets in Liberia; the curriculum provided the tools and guidelines for this activity. The master trainers subsequently trained all the CHVs on how to assess the households and distribute the nets to each house.

The CHVs were trained to provide four meters of twine and four nails per net to each household to hang each net. In addition, the CHVs removed the nets were removed from their plastic bags before handing them over to the recipients.

Identification of Local Printers and Contracting for Production of Information Education and Communication/Behavior Change Communication (IEC/BCC) Materials for Use in LN Distribution Campaign

Based on IEC/BCC materials used in earlier campaigns in 2008, the Project and the NMCP IEC/BCC unit drafted messages on the net distribution campaign and mosquito net use were drafted by the project and the NMCP IEC/BCC unit. The drafts were reviewed and approved by the NMCP communication officers and the Mission. After agreement from the abovementioned stakeholders, the IEC/BCC messages were printed on sheets for distribution to schoolchildren in each district of the counties participating in the campaign. The same messages were translated into eight local languages and recorded for radio broadcast.

Beginning on April 27, 2009, two teams from the IEC/BCC unit of NMCP mobilized a total of 15 schools in each of the three counties. A hundred schoolchildren in each district were given printed messages on malaria and the role of mosquito net/LN use in prevention of the disease. The schoolchildren were asked to read and share these messages with their friends and families, and each participating child received a snack.

The IEC/BCC unit also contacted county-/district-level community radio stations and had them sign Project contracts to broadcast the messages for 60 days, ending June 16, 2009. Contracts were signed with five radio stations in Bassa County, four in Nimba, and four in Lofa.

Local Transporters and Storage Facilities

The mosquito net procurement contract with BASF included delivery of the LNs to a storage facility in Liberia. With the assistance of the World Health Organization (WHO), the Project identified a secure storage facility belonging to Joseph Hakin in the Bushrod Island area of Monrovia where the LNs were held until delivery to the counties could be arranged. The facility, which had a capacity of 2,624 square meters and was adequate for storage and sorting of bales, was leased for 30 days at a cost of \$4,000.

The Project implemented a competitive tender to select a suitable transporter to deliver LNs from Monrovia to the counties. The lowest-priced vendor, Law Enterprise, was selected. Its quote was \$29,642, compared to quotes of \$41,340 and \$47,200 from the other vendors. The NMCP raised concerns about the ability of the vendor to undertake the activity and making a selection based on cost alone.

Logistics Management Information System (LMIS) and Security of LNs During Distribution

Waybills and stock cards were used during the campaign, and Law Enterprise returned a signed waybill from each district as proof of delivery. The transporter received no payments until it furnished waybills.

Each district store maintained a stock card recording the receipts from Monrovia and issues to the CHVs. Issues were made on the waybills. Community leaders and the police were mobilized and instructed to impound any LNs moved/transported without a waybill.

The district stores employed a storekeeper and three guards. Two of the watchmen worked at night, and the third one watched the net movements during working hours.

Mobilization of Leaders and Communities

This sought to raise awareness of the causes of malaria and the use of LNs in preventing the disease. NMCP assisted the CHTs in advocating within the county and district-level leaders for support to the campaign. The CHTs held various advocacy meetings with leaders at county and district levels. First, the County Superintendant held a meeting with district leaders and their representatives who then held more meetings with other leaders within their districts. Schoolchildren in each county were given printed messages to pass on to friends and families to increase awareness on the mosquito net campaign.

Post-Distribution Review Meeting

The review meeting was held on June 12, 2009, at Krystal Ocean View, Monrovia. The objectives of this stakeholder review meeting were to:

- list the successful aspects of the campaign;
- identify major constraints faced during the campaign; and
- propose interventions to address constraints and/or improve performance.

Thirty-five participants attended the review meeting from the USAID Mission, Ministry of Health and Social Welfare (MOHSW) NMCP, WHO, United Nations Children's Fund (UNICEF), United Nations Development Program (UNDP) (Global Fund), MENTOR, EQUIP, LNsForLife, and the Project. CHTs were also represented, as were the Law Enterprises. The meeting was officially opened by the Hon. Assistant Minister of Health, Dr. Pewu, following opening remarks given by the Deputy NMCP Manager and USAID | PMI advisor.

Three presentations of interim reports from each of the three counties contributed the primary input. These reports described the malaria burden in the county and the LN campaign process, logistics activities, assessment, and mobilization through distribution of LNs. The counties presented achievements and constraints faced during the campaign as well as some recommendations for improvement.

The meeting was generally critical of the Project, criticizing the planning process, transport provision for intradistrict net delivery, lack of feedback, and coordination with CHTs on the plans and implementation process. The PMI advisor acknowledged the Project's contribution to a successful campaign, which achieved secure delivery of close to 430,000 LNs.

Achievements & Challenges

Achievements of the Distribution Campaign

During this campaign, 230,000 households (approximately 1 million people) were reached with 426,096 LNs, representing 72% coverage of the target population. Ninety-nine percent of the 430,000 PMI-funded LNs were distributed through the campaign. The CHTs will distribute the remaining nets through ANC clinics. This was achieved through the following:

- Fifteen contracts with local partners for broadcasting, printing, transportation, food catering for training activities and meetings, and storage and delivery of LNs to districts were executed. Local printing/multimedia companies were used to produce IEC/BCC materials/messages.
- Sixteen radio stations broadcast malaria and mosquito net use messages at least three times a day for 60 days.
- A total of 1,754 contracts were issued to CHVs, supervisors, and coordinators for their roles in community assessment and mobilization and distribution.
- Materials (ropes and nails) were supplied with every net to assist households with hanging the LNs.
- An LMIS system for LN supply and distribution to track net distribution during the campaign was implemented. This included the following.
 - Waybills or delivery notes issued by Law Enterprise at the central store in Monrovia for each consignment to the districts. The waybills were signed by receiving stores in the district and returned to Monrovia, where Law Enterprises presented them to the Project as proof of delivery.
 - Stock Record Cards maintained at each district store, showing number of bales and units of LNs received and details of issues to the communities.
- A security system to minimize the incidents of mosquito net pilferage and loss was used that included secure district stores, waybills, stock records, and watchmen. CHVs were instructed to keep empty mosquito net bags and return them to the district store to verify distribution to households.
- Mobilization of more than 1,600 community health volunteers to carry out a door-to-door assessment, mobilization, and distribution of LNs. These covered over 200,000 households in three counties.
- Successful port receipt and clearing of LNs, storage in Monrovia, delivery to districts and communities, and, finally, door-to-door distribution
- The first post-distribution campaign review meeting of its kind was held, which elicited lessons learned and recommendations for future door-to-door LN distribution in Liberia.

The Challenges Faced

There were a number of challenges encountered, which are summarized here.

Planning Process

The planning process was protracted and stalled on several occasions because of extended deliberations on the selection of the LN vendor; lengthy negotiations around the distribution budget; lack of

clarity about respective roles during the micro-planning; debate concerning the flow of funds through the Office of Financial Management (OFM); and the Project's contractual restrictions on providing funds to government entities. The impact of these delays was exacerbated by the unplanned departure of the resident logistics advisor and the lack of transition for the incoming team. Together, these resulted in a situation where the LNs were due to arrive soon, and there was no comprehensive micro-plan that had the support of all the partners involved—NMCP, CHT, and the Project.

Logistics—Storage and Distribution of LNs

Law Enterprises was contracted to truck LNs to the district stores. Each district was allocated a motor vehicle to deliver the LNs to the communities. Delivery from Monrovia to the districts started on May 9 and was completed on May 22, with some delays due to bad roads. The intradistrict delivery faced some challenges resulting from

- The limited number of vehicles allocated—some districts spanned large areas and could not be covered easily by one vehicle. More vehicles were unavailable because of limited budget.
- The type of vehicles used—in Nimba County, some of the motor vehicles were not of the right size and quality to cope with the workload.
- Delays in allocating/procurement of fuel for the motor vehicles.

For these reasons, deliveries of LNs to some communities were delayed, leading to delays in completion of the door-to-door distribution of LNs. In Nimba, this resulted in an extra three days for distribution. In Bassa County, an extra vehicle was hired to assist delivery of LNs in District 3, the largest district in the county. In Lofa, the CHT decided to distribute and hang LNs for households, which caused a five-day delay in completing distribution in districts where the CHVs assisted with hanging LNs.

Insufficient Number of LNs and Differing Allocation Strategies

The assessment results revealed that there were more sleeping places than the plan had estimated. This meant that there was a shortfall of LNs in most districts. There was confusion around the allocation strategy, whether it was one net to every sleeping place up to a maximum of three, or one net to every sleeping space found. The Lofa County Superintendent decided to ration LNs and provide a maximum of three per household. Nimba and Bassa followed the strategy of a net for every sleeping place. As discussed above, where CHVs helped households to hang the LNs, the distribution period increased by five days (Lofa County). To complete the exercise within the allotted time, and still assist with net hanging, NetsForLife employed 43 extra CHVs in the three districts where they participated.

In all counties, the number of LNs was insufficient, regardless of allocation strategy. Both options posed challenges to implementation as the assessment and mobilization activities primed households to expect a mosquito net for every sleeping place found.

Recommendations

Distribution Strategy

- Distribution strategies should be discussed and agreed on before procurement to be certain of desired coverage.
- The budget for distribution should reflect the agreed-to strategy.
- The allocation should be agreed to (all sleeping spaces or a limit of three per household), and this allocation should be included in the IEC/BCC messages surrounding the campaign.

Planning

- Planning should involve all stakeholders (from within and outside the MOHSW) to avoid conflicting campaigns and to create collective ownership of the plan.
- Planning should begin far in advance of the campaign. The lead time for LNs has been averaging five to six months.
- Estimates of quantities of nets required by district should be made before ordering the nets so direct delivery to each district can be included in request for quotations. This would allow the vendor to take responsibility for clearing and delivering directly to the districts, thereby limiting the need for central storage and multiple transfers of LNs.
- Micro-planning should also begin well in advance of the campaign and should include all partners who will be involved in the distribution.

Fund Management

- Clarification of USAID finance management should be provided to partners to avoid conflict, and USAID and its contractors should present a common message on financing regulations to in-country partners.
- If USAID has not approved channeling funds through the OFM by the next distribution, then an alternative approach to fund management needs to be agreed to upfront by all partners.

Mobilization and Awareness Raising

- The successful mobilization of students and community leaders during this campaign should serve as a model for future campaigns.
- Engaging the police early on