LLIN DISTRIBUTION REPORT

Ntcheu District, Malawi

October 2011- February 2012

Carried out by Concern Universal with Ntcheu District Council

LLINs Provided by Against Malaria Foundation

Distribution funded by Irish Aid, Malawi

Background.

Malaria is the leading cause of mortality and morbidity in Malawi. Plasmodium *falciparum* is the most common species accounting for 98% of infections and almost all of the reported cases of severe disease and death. In Malawi the peak malaria transmission season follows the rainy season (late November to mid March). It is estimated that Malawians receive 30 to 50 infective bites per year.

The Malawi government through the directorate of preventive health services in the ministry of health established the National Malaria Control Programme (NMCP) with the goal of reducing the level of malaria related morbidity and mortality from 2004 figures by 50% by 2010 and 75% by 2015. To achieve these goals the NMCP laid down malaria preventive and control interventions which included health promotion, distribution and usage of Long Lasting Insecticide treated Nets (LLIN), intermittent presumptive treatment for malaria in pregnancy and indoor residual spray as primary malaria preventive interventions.

The government of Malawi with assistance from the Global Fund and other partners is currently implementing a universal coverage national campaign with long lasting insecticide nets. Currently various donors are contributing LLIN for the national campaign: Global Fund to fight Aids, Tuberculosis and Malaria has offered 4,740,480 LLIN, USAID's President's Malaria Initiative, 477,000 LLIN, Against Malaria Foundation is contributing 268,000 LLINs and Millennium Village Project 30,000 LLIN nets.

It is against this background that Concern Universal Malawi and Ntcheu District Council conducted a Universal Long Lasting Insecticide Net (LLIN) Distribution Programme across Ntcheu District as part of the National Malaria Control Programme Universal distribution efforts. Against Malaria Foundation provided the 268,000 LLINs for distribution in Ntcheu District whilst funds for distribution operations have been provided by Irish Aid. This stock of nets will be sufficient to ensure coverage of every sleeping space in Ntcheu District.

NET DISTRIBUTION

The programme commenced in late October 2011 and there were a number of activities which were lined up and have been carried out including Orientation, Registration, Data Entry, Verification and Distribution.

Ntcheu District Health Office has 37 health facilities ranging from health centres to health posts. These health facilities belong either to the government or Christian Health Association (CHAM). There are 22 public health facilities of which 18 are currently capable of carrying out malaria diagnosis through rapid diagnostic test while the 15 health facilities which belong to Christian Health Association of Malawi are all able to carry out malaria diagnosis.

In order to plan the logistics and administration of the distribution the District Council and the project team clustered the district health facilities into five zones of Tsangano (Tsangano, Doviko, Matanda, Katsekera, Mzama and Dzonzi Mvai). Ntonda (Nsipe, Champiti, Kapeni, Ntonda, Namisu, Matchereza, Senzani, Manjawira, Mikoke, and Nsiyaludzu). Bwanje (Bilila, Dzunje, Bwanje, Sharpe Valley, Kasinje and Phanga) Mphepozinai (Chiole, Mphepozinai, Muluma, Gowa, Kandeu, Kampanje and Chigodi) and Lizulu (Masasa, Mlanda, Lizulu, Lake View, Mlangeni, Biriwiri and Ntcheu Boma).

Orientation

The project then carried out an orientation process whereby stakeholders were sensitised on what the project is expected to achieve and how this will be achieved. The target groups were the District Executive Committee (DEC) members, the local leaders, the District Health Management Team, the District Environmental Health Team and the Health Surveillance Assistance (HSA).

The orientation process was in two categories, one being a briefing and sensitization targeted at the District Executive Committee members, local leaders and the District Health Management Team so that they were aware of what is to take place in their respective areas of jurisdiction. The second was detailed briefing and training for the Health Surveillance Assistants so that they are knowledgeable of their important role in the process, to understand why there is the mass LLIN campaign and how the registration data is going to be collected. It was during the HSA orientation that the data collection forms were introduced and delivered.

Registration

Registration was conducted in all villages under Ntcheu District Council. The registrations were carried out by the Health Surveillance Assistants, who each is assigned villages under their jurisdiction in a health centre catchment area. There were 431 HSAs who took part in the process and these were under 14 HSA supervisors. All the HSAs were trained on data collection during the orientation period. 18 health centre orientation clusters were formed to facilitate speedy outreach to the HSA. Annex 1 is the registration form that was used to capture the household data.

The data that was collected per household included:

Health centre: This identified the health centre under which the village of the beneficiary belongs.

GVH: This is the group village head under which the village of the beneficiary belongs.

Village: This identifies the village in which the beneficiaries.

HSA Name: This identifies the HSA who collected the data.

Name of the household. This indicates the identity of the beneficiary.

Total number of people in the household: This identified the number of people living in the house.

Number of beneficiaries: This segmented the beneficiaries into under fives and those over five years of age.

Total number of usable LLIN in H/H: This identifies the household if it has usable LLIN already. The HSAs are trained on how to identify LLIN nets and also how to declare a net usable or not usable (to be a useable it has to be an LLIN and be classed as in Good condition (defined as having fewer than two holes of less than 2cm in diameter). If the household has a net, the data collector was told to call for the nets to physically verify whether it qualifies to be usable or not.

Number of sleeping spaces in the house: This column was used to identify the sleeping spaces the household has. The sleeping spaces are the actual places in the house that are laid when the occupants are sleeping. This was the major determinant in net allocation because the

exercise was about covering the unprotected sleeping spaces rather than distributing nets per numbers of household members.

Number of LLIN required: This column indicate the number of nets to be allocated to the household. It is the difference between the number of sleeping spaces in the household and the total number of usable LLIN in the household. This field was completed by CU staff at the office.

Registration data collection was done within a period of 5 days following HSA training.

Procedures were put in place to facilitate a transparent registration process across the District. During village beneficiary registration process the HSAs were accompanied by the village headman, a member of village development committee (VDC) and a village health committee member who accompanied them as they visited every household to register it. The presence of the village head was to make sure that all his village members were reached during the exercise. This also facilitated transparency in declaring the number of members of a particular household on the part of the registered beneficiary.

Table 1 below shows the total number of nets, per health centre, that was required when the initial registrations were conducted.

Table 1: Number of Nets Required Following Initial Registration

NAME OF HEALTH CENTRE	REGISTERED NETS REQUIRED	NAME OF HEALTH CENTRE	REGISTERED NETS REQUIRED
Bilila	4,925	Manjawira	2,798
Biriwiri	4,796	Masasa	3,754
Ntcheu D. Hospital	23,635	Matanda	4,274
Bwanje	16,505	Matchereza	1,813
Champiti	4,953	Mikoke	3,393
Chigodi	4,336	Mlanda	3,319
Chiole	3,792	Mlangeni	3,093
Doviko	2,244	Mphepozinai	13,193
Dzonzi Mvai	1,828	Muluma	2,336
Dzunje	14,048	Mzama	4,587
Gowa	8,035	Namisu	1,709
Kampanje	2,336	Nsipe	8,469
Kandeu	8,525	Nsiyaludzu	13,850
Kapeni	1,374	Ntonda	9,064
Kasinje	22,034	Phanga	1,716
Katsekera	6,466	Senzani	5,223
Lakeview	3,877	Sharpe valley	9,964
Lizulu	8,009	Tsangano	9,733
Total			**244,006**

Following registration the total number of nets required was 244,006 for the 782 villages.

Data entry

The registration forms were collected from the HSAs after the registration period. The forms were collated per village and were submitted to CU's data centre in Balaka for data entry. The data was captured in an access database. This process took five weeks in total eight data entry clerks had to be enlisted in order to complete the work. Print outs from each village were printed for verification. After verifications the new data were again sent to the data centre for incorporation into the database.

Verification

The project carried out the verification process as a means of initial data cleaning for both data collected from the villages and data entered into the project's database. This activity was carried out to verify the presence of the beneficiaries in the villages.

This process was carried out by verification teams which comprised of CU staff members, District Health Personnel and HSAs. Follow up visits were made to all the villages where data was collected to make further data verifications and corrections in order to ensure that no beneficiaries were missed during initial data collection and beneficiary registration and that only genuine village members had been registered. To reach out to every one of the 782 villages individually would have been very timely hence the villages were clustered to reduce the contact points. The clusters were formed with the assistance and identification of the HSAs. The clustering was based on the closeness of the villages and one village was identified to be a meeting point. There were 282 clusters that were formed. The cluster has a village composition ranging from one to five depending on the size and geographic proximity of the villages. During the verifications the villages at the cluster convened at the point identified. All the village heads of the villages in the cluster were present during the verifications. The verification team had both the computer printout and the raw registration data form. Every household in the computer printout was roll-called together with its particulars, and the HSA had to compare what was being called out in the printout against what is in the raw registered data.

Verification of the long lasting insecticide treated nets registers was done at village level where everyone was present. The village community were eagerly listening as team members were calling out the name of the household, the number of people in the house hold, number of LLIN in that household, Number of sleeping spaces in the household in question and finally the number of nets the household will receive. Upon completing name calling out, those villagers who did not hear their names being called were registered so that they can be included in the data base. One HSA was assigned to cross check the call out from the printout roll with the raw data and where the printout differed with the raw data and this was noted was later sent back to the data centre for data updating. The community also played an important role during the verification in that whenever a name has been called that does not exist in their village, they advised the team members to delete such a beneficiary and this was mostly recommended when the village head gave a nod. The other strength of the roll calling during the verification was that whenever the data that the beneficiary gave on registration was different with what the community knows about the household, the community could raise the issue and the beneficiary could be taken to task to justify and where the community is not in agreement with the justification, they were advising and recommending the verification team members on the total number of the nets the household should get. This improved transparency of the net distribution process.

The verification team also performed a number of random spot checks to individual households to ascertain that the information provided during verification was indeed genuine.

The verification process added 10% in addition to the initial total number of nets that was thought to be required after registration. This increase was largely due to community members whose details had not been captured during the initial HSA registration exercise. In some cases whole villages had been missed during the registration process. In addition the verification also highlighted some double entry of names and potential ghost names which were removed from the lists.

Figure 1: Verification process at Katsala 1 Village in Tsangano health centre.

Table 2 showing changes in the number of nets required after verifications.

NAME OF HEALTH CENTRE	REGISTERED NETS REQUIRED	NETS REQUIRED FOR DISTRIBUTION	Change in nets required	% Change
Bililа	4,925	12,485	7,560	153.5
Biriwiri	4,796	6,410	1,614	33.7
Ntcheu D. Hospital	23,635	25,549	1,914	8.1
Bwanje	16,505	16,939	434	2.6
Champiti	4,953	4,543	-410	-8.3
Chigodi	4,336	4,737	401	9.2
Chiole	3,792	3,782	-10	-0.3
Doviko	2,244	2,608	364	16.2
Dzonzi Mvai	1,828	1,836	8	0.4
Dzunje	14,048	14,900	852	6.1
Gowa	8,035	8,232	197	2.5
Kampanje	2,336	3,736	1,400	59.9

Kandeu	8,525	9,543	1,018	11.9
Kapeni	1,374	5,902	4,528	329.5
Kasinje	22,034	22,932	898	4.1
Katsekera	6,466	7,918	1,452	22.5
Lakeview	3,877	3,952	75	1.9
Lizulu	8,009	8,597	588	7.3
Manjawira	2,798	3,220	422	15.1
Masasa	3,754	2,804	-950	-25.3
Matanda	4,274	3,423	-851	-19.9
Matchereza	1,813	2,283	470	25.9
Mikoke	3,393	2,764	-629	-18.5
Mlanda	3,319	3,541	222	6.7
Mlangeni	3,093	3,227	134	4.3
Mphepozinai	13,193	12,921	-272	-2.1
Muluma	2,336	2,700	364	15.6
Mzama	4,587	4,868	281	6.1
Namisu	1,709	2,031	322	18.8
Nsipe	8,469	10,802	2,333	27.5
Nsiyaludzu	13,850	16,258	2,408	17.4
Ntonda	9,064	5,626	-3,438	-37.9
Phanga	1,716	2,070	354	20.6
Senzani	5,223	5,030	-193	-3.7
Sharpe valley	9,964	11,150	1,186	11.9
Tsangano	9,733	10,547	814	8.4
Total	**244,006**	**269,866**	**25,860**	**10.6**

The verification process took the verification team of 10 members 18 days to complete and in a day 20 clusters were verified with 10 verification sites in the morning and 10 verification sites in the afternoon. During the verification 53 extra villages were identified and registered. There existed the highest increase percentage of 153% in nets required for Bilila as most of registrations in the health centre were not conducted during the team's registration period. There were 17 villages which were inherited from the previous mass distribution. These were the villages that were registered but verifications and distributions were not conducted hence we included them during the verification. For the health centres (Champiti, Chiole, Masasa, Matanda, Mikoke, Mphepozinai, Ntonda and Senzani) that have the negative percentage change this was basically due to removal of registration duplication, reallocation of misallocated villages and deletion of village fictional beneficiaries. At the data centre, after accommodating new entries from the verifications, the data underwent another cleaning process to removal of all double entries. One of the attributes to double entries was creation of a village within a village. This was unmasked during the verifications and some villages were merged as the households proved to be the same.

Distribution

The LLIN distributions were done by Concern Universal staff in collaboration with Ntcheu District Health Office Staff. The distribution plan, refer attached table 5, was made to assess the progress and monitor the exercise. The distributions were scheduled to have been concluded

within 28 days with the team distributing at 10 clusters per day covering five weeks. During the distributions a total of ten volunteers from Microsoft Europe and PriceWaterhouseCoopers UK assisted with the village based distributions over a three week period.

126,720 of the nets received were Olyset nets manufactured in Tanzania whilst the other 125,000 were Permanets manufactured in Vietnam. There was a delay in securing the release from customs of the Permanets hence the first two weeks of distribution saw the use of Olyset nets only- henceforth distributions were mixed wherever possible.

At a distribution point beneficiaries from villages in the cluster gathered together with their local development and elected leaders. The distribution registers which were in duplicates were called at one village after another and the called beneficiaries lined up to receive their nets. Upon completing distribution one copy was collected for office records and the other register was left with the village leaders.

Before each distribution commenced the distribution group provided health education on malaria control and prevention as well as demonstrations on net usage and hang-up.

Figure 2 During distributions, the distribution team gave malaria health talks, here the team are demonstrating how to hang the nets.

For planning purposes the distribution team together with the district health office staff agreed to carry out a pilot net distribution from 16th to 30th December 2011. The purpose of the pilot distribution was to ensure that the areas of the district which would be inaccessible after the major onset of the rains in January and February as these will be the months that the distribution will be carried out, should receive the LLINs, secondly was to learn and draw lessons around logistics, distribution methodology so as to inform the conduct of the main net distribution. During the pilot period, the following were the lessons that were drawn:

- it was realised that in order to deliver 250,000 LLINs before end of February 2012 there will be need to reinforce manpower and vehicles to the distribution fleet. During the pilot distribution, the team relied on the DHOs lorry which was used to ferry the nets from the warehouse to the health centres before the distribution day, it was observed that at times this vehicle was assigned some other duties to perform hence the team had to use the shunting pickups which delayed the

process. It was then recommended that there be a reliable 3 tonne truck to ferry the nets to the health centres a day before distributions. It was also learnt that there is need to have extra two pickups to ferry the nets from the health centre to the distribution point on the day of distributions.

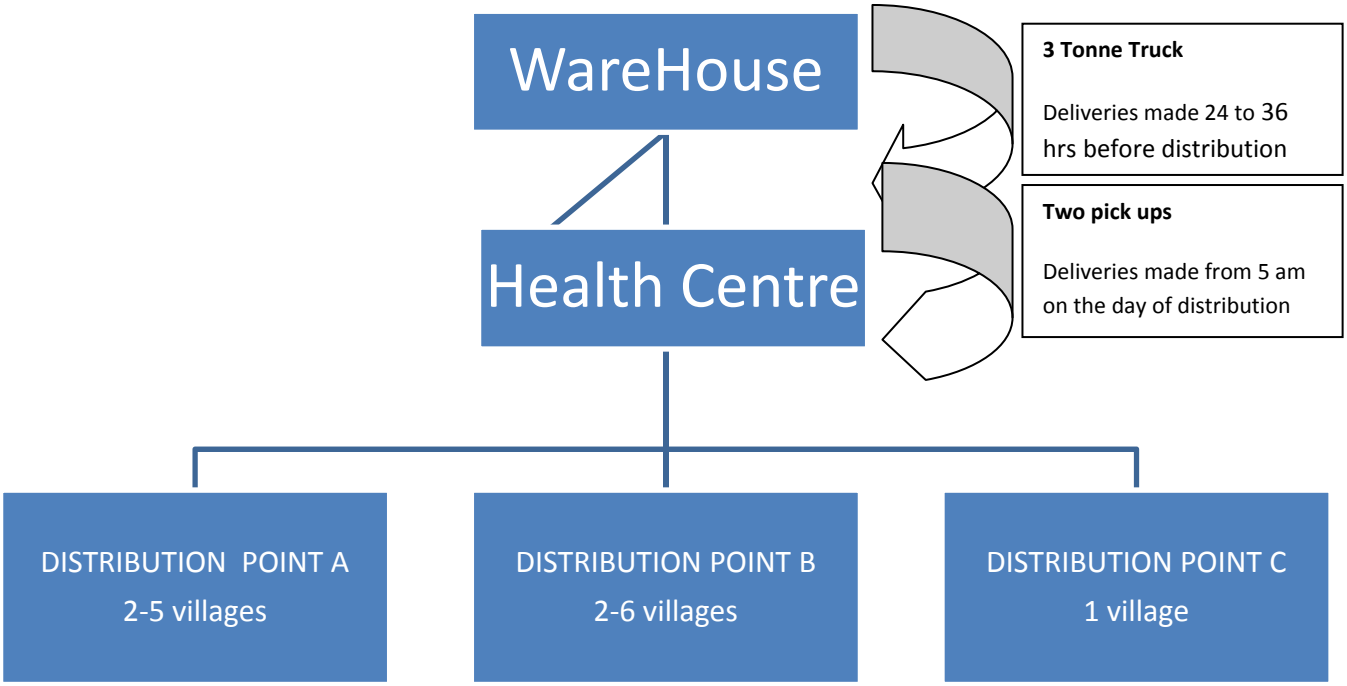
- It was again realised that if the team is to distribute the nets in good time then they have to be at the distribution points by 9 o'clock in the morning hence the ferrying pickups have to make it to the health centre by 6 o'clock in the morning.

During the pilot distribution, 21,377 LLIN nets were distributed in 63 villages of the five health centres of Tsangano, Doviko, Matanda Phanga and Katsekera. The total households that were covered during the distributions were 11,647.

From the lessons that were learnt during the pilot distribution which took 7 days to complete and cover 25 clusters, an improved plan was put in place after sensing that if the team was to cover three to four clusters in a day then the February end target will not be met. Hence it was formulated that for effective distribution also bearing in mind time factor the work force was increased to 14 distribution clerks and 10 clusters were to be covered in a day thereby we were now expected to cover the remaining 263 clusters in 26 days.

The major distribution exercise was carried out from January 2012 and attached Table 3 is the timetable that was developed. The distributions commenced on 9th January as planned. There were moments when the team had to cover more than the 10 required clusters per day as this was done to reduce operational costs due to geographical position of the clusters that were to be done on the following day. The plan was also made in such a way to accommodate public holidays so that it is not affected in its operations for instance like when we had a public holiday the team and community agreed that distributions be covered on the preceding Saturday.

There were 14 distribution clerks that participated in the distributions; the movement of the nets were made in such a way that:



A three tonne truck was allocated to transport the Nets from the warehouse to the health centre.

Figure 3: A three tonne truck loading nets in the Warehouse to deliver at a Health Centre.

Two land cruiser pickups were used to ferry the nets from the health centres to the distribution points.

Figure 4: Pickups transporting the nets from the health centres to the distribution points.

Two vehicles were allocated to ferry personnel to the distribution points.

Figure 5: Vehicles ferrying the distribution team to a distribution point.

The first week distributions were done in 6 days and 204 villages were covered reaching out to 22,969 households. Of the 47,787 LLINs that were projected for distribution 47,058 nets were distributed covering a distribution percentage of 98%. These distributions covered 63 clusters and 11 health centres of part of Katsekera, Mzama, Dzonzi Mvai, Nsipe, Champiti, Kapeni, Ntonda, Namisu, Matchereza, Senzani and Mikoke.

Figure 6: Beneficiaries receiving the LLIN nets during the net distribution exercise

The second week of the distributions commenced on a Tuesday since Monday was a public holiday. During this 4 day week, 40 clusters from four health centres of Manjawira, Nsiyaludzu Bilila and part of Dzunje, were covered and a total of 42024 LLIN nets were distributed to 131 villages covering 15,590 households. 99% distribution coverage was achieved during this week.

During the third week, the distributions were conducted in the following health centres; Dzunje, Bwanje, Sharpe valley, Kasinje, Chiole Mphepozinai. See attached table distribution plan. During distribution of the 62,508 nets that were required for distribution, 61,104 were distributed representing 98% coverage. This is the week the team distributed the highest number of nets. This was mainly due to the high population density which exists along the Bwanje valley. This is the most populous part of the district hence high demand for the nets and large numbers of proximate villages and distribution sites. There were 150 villages that were covered harbouring 25,403 households. During the distributions, there were five villages that were could not be identified with their cluster hence did not receive their nets but were later covered in the following week. This attributed to the high number of nets returned.

During the fourth week, the following health centres were covered; Mphepozinai, Muluma, Gowa, Kandeu, Kampanje, Chigodi and part of the remaining Kasinje health centre five villages. During the week a total of 38,740 of 38,887 nets were distributed. This represents 99.6% distribution coverage. There were 147 villages that were covered during the distribution. This distribution included the five villages that were not identified during the Kasinje distributions. A total of 19,442 households were reached.

During week five of the distributions, the following health centre were covered, Masasa, Mlanda, Lizulu, Lake View, Mlangeni and Biriwiri. The distributions covered 91 villages with a total of 13,042 households and a population of 55,112 inhabitants. Of the 26,858 unprotected sleeping spaces 26,831 sleeping spaces were protected during the exercise this represented 99.9% coverage. During the week the team was also supposed to have distributed 25,549 LLINs to Ntcheu town but was not able to do this due to the fact that we had already used up the existing

net stock. 16,700 LLINs arrived in Ntcheu in March and will be used to cover off the final households in Ntcheu town in late March and early April.

MOP UP DISTRIBUTIONS

After the distributions it was deemed right to have a mop up session whereby the distribution team went throughout the all the villages that had significant numbers of some beneficiaries that not receive the nets. This was after the team established why some beneficiaries did not receive nets and paid attention to some of the queries from the village heads. In fact there were some cases where distributions were not carried out because of logistical challenges. These queries ranged from transferred beneficiaries to those who were skipped registering after the verifications. Most of the nets distributed during this period were for those who did not turn up during the pre distribution survey. This was because we had to reschedule distribution dates for some distribution clusters due to logistical challenges that lead the team to come up with better recommendations for the major distribution in January. As stated above Tsangano zone had a huge number of Mop Up distributions as it was an area where a number of issues had been identified with data integrity during the distribution.

At Tsangano health centre there were three villages of Katsala (662 nets), Makwangwala (29 nets) and Saulosi (205 nets) that were skipped during the distributions and were incorporated during the mop up. At Doviko and Matanda health centres 164 and 133 nets were distributed during the mop up respectively. Dzonzi Mvai had 69 nets distributed during the mop up exercise. There was an addition of 22 sleeping spaces that was catered for during the distribution. This was because of the transfers. At Nsipe health centre, 77 LLIN were distributed to identifiable beneficiaries and a balance of 156 nets of the registered nets demanded for the health centre was realised. At Nsiyaludzu health centre a total of 532 nets were distributed despite an initial gap of 102. This emanated from the three villages of Mberengwa (120 nets) James Ipu (161nets) and Chauluka 2 (164 nets) which were registered after the verifications and the data centre had not released the registers when distributions were being conducted. Hence of the 102 nets returned the campaign managed to reach for the 87 as the remaining could still be not identified. At Biriwiri health centre there were extra 1,670 sleeping spaces that were provided with LLINs. Household number increased from 2,870 to 3,139. Biriwiri had its own experience as far as registrations were concerned. It is a peri-urban trading centre which borders Mozambique and has a very active market. Many beneficiaries were left out during the registrations as they didn't believe it was real and when they saw the reality that the net distribution was actually happening they complained and we had to include them in the database with the assistance of the village heads hence the inclusion of the additional sleeping spaces.

The table 3 below summarises the distributions per health centre. There were a total of 242,745 nets that were distributed of the projected 244,317 nets required.

Table 3 Final Total Distribution Data by Health Centre

Health Centre	Number of villages	Number of households	Population	Number of sleeping spaces	Usable LLIN in place	Nets required	Nets distributed
BILIRA	31	6,247	26,298	14,020	1,532	12,485	12,460
BIRIWIRI	24	3,139	13,075	6,802	392	6,410	6,407
BWANJE	27	7,903	34,027	18,073	1,134	16,939	16,778
CHAMPITI	20	2,107	8,369	4,719	210	4,543	4,502
CHIGODI	15	2,870	12,284	5,901	1,164	4,737	4,737
CHIOLE	11	1,643	6,758	4,304	522	3,782	3,776
DOVIKO	5	1,281	5,660	2,642	34	2,608	2,603

DZONZI MVAI	8	878	3,633	1,641	311	1,836	1,836
DZUNJE	42	7,418	30,506	16,439	1,539	14,900	14,764
GOWA	25	3,396	13,969	8,890	658	8,232	8,229
KAMPANJE	18	2,331	9,605	4,693	957	3,736	3,688
KANDEU	35	4,907	21,229	10,471	928	9,543	9,462
KAPENI	31	2,893	11,494	6,502	600	5,902	5,884
KASINJE	60	10,790	47,065	23,613	681	22,932	22,932
KATSEKERA	21	3,407	14,900	8,553	635	7,918	7,898
LAKE VIEW	8	1,790	7,848	4,277	325	3,952	3,952
LIZULU	22	3,843	16,088	8,704	107	8,597	8,587
MANJAWIRA	8	1,611	6,861	4,111	891	3,220	3,220
MASASA	10	1,387	5,868	3,131	327	2,804	2,803
MATANDA	10	1,573	7,161	3,889	466	3,423	3,421
MATCHEREZA	12	1,223	5,322	2,647	364	2,283	2,134
MIKOKE	12	1,448	5,849	3,153	389	2,764	2,747
MLANDA	18	1,582	6,342	3,640	295	3,541	3,541
MLANGENI	9	1,570	6,682	3,588	361	3,227	3,227
MPHEPOZINAI	45	6,226	25,416	13,515	594	12,921	12,888
MULUMA	15	1,461	5,764	3,370	670	2,700	2,699
MZAMA	20	2,324	9,247	4,971	105	4,868	4,846
NAMISU	10	1,067	4,508	2,246	215	2,031	2,031
NSIPE	41	5,148	21,237	12,024	1,222	10,802	10,646
NSIYALUDZU	55	7,961	31,981	17,797	1,539	16,258	16,243
NTONDA	21	2,461	10,285	5,941	315	5,626	5,498
PHANGA	15	972	4,462	2,160	90	2,070	2,070
SENZANI	20	2,371	10,393	5,450	420	5,030	4,842
SHARPE VALLEY	30	5,067	22,759	11,785	635	11,150	11,126
TSANGANO	26	4,878	23,415	11,034	487	10,547	10,268
TOTAL						**244,317**	**242,745**

The table above excludes the distribution for Ntcheu district hospital catchment area. This distribution will be conducted in late March and early April when the project receives the additional 16,574 LLINs from AMF. From the 251,720 nets we received 242,745 nets were distributed and we have a balance of 8,975 LLIN nets and Ntcheu district hospital requires 25,549 LLIN.

You will see from the table above that there is a nominal deficit of 1,572 nets across Ntcheu health centres. We believe that the majority of this nominal deficit is either ghost names or people who have moved out of the area. Following the mop-up distributions we do not believe that further visits to the relevant Health Centres will lead to the identification of a significant number of these names. As such we have written this balance off and will concentrate solely on distributing for Ntcheu District Hospital's catchment area.

The table below indicates Ntcheu District Hospital data.

Table 4 Planned Distribution March/April Ntcheu District Hospital

Health Centre	Number of villages	Number of households	Population	Number of sleeping spaces	Usable LLIN in place	Nets required
Ntcheu D. Hospital	53	10,102	45,432	26,973	1,424	25,549

CHALLENGES.

Registration.

The following were the challenges that were encountered during the registration period.

Some HSAs for one reason or another did not involve the village heads and volunteers when registering the beneficiaries as recommended. This raised a number of challenges during the verification as a number of beneficiaries were skipped out during the exercise..

There were some anomalies in registrations as in some cases village heads instead of visiting the beneficiary households as prescribed, they instead called a village meeting at the village heads court- in these cases we found the data collected was often inaccurate. In others cases, the HSA instead of conducting the registrations with the village leaders, delegated this to the villagers and this brought about misinformation as some households were missing from the registration roll.

The identification of some villages was a challenge as a village could be within a bigger village and the beneficiaries having registered in both bloated the number of nets required only to be reduced during the verification. This wasted time of the data entry personnel.

There were times when some supervisors could collect the registration forms from the HSAs- this posed a greater challenge in that the data was not cleaned when collected. During data collection the team was cleaning the data in that every HSA had to declare the villages that are under his or her jurisdiction then the forms were collected per village under that HSA this provided assurance that forms have been collected for all the villages. Where the name of the village does not tally with the villages on the HSAs village list clarification was required and correction made prompt. Since this village data collection process was collected in the present of all the HSAs at the health centre, it reduced creation of ghost villages. During the registration form collection, the team was also checking on a number of issues like how the data has been collected, completeness of the data and the use of initials. Where the names were lacking the first names the forms were sent back to the HSA to fill in the real first names. But where the forms were collected by the supervisors such data was not being reviewed and it created a lot of confusion during data entry as some forms did not have names of villages, or the name of Traditional Authority, or name of Group Village Head. This piled up tasks for verifications.

Data Entry.

The major challenge that was faced during the data entry was the under-projection of the data entry clerks. The project anticipated that four data entry clerks will do the task but this was too low for the quantity of forms and the time it required to complete the task thoroughly. This necessitated the project to take on an extra four data entry clerks. This also meant that the project had to provide four extra computers.

Delays in data entry also delayed the verification process in that the verification team had to wait for some weeks for the verification forms to be released from the data centre.

Incomplete data forms was another challenge in that Ntcheu district had a number of villages with the same name. When the identity data was incomplete such villages could be placed under THE wrong health centre or traditional authority and this meant that villages were missed during the verifications when in fact the village had been placed under the wrong health centre.

New data registration and deletions from verification were supposed to be written on the forms in red ink so that the data entry team could identify such data as new and accord it the attention it deserves. However there were circumstances when the verification team for one reason or another used black or blue ink and such additions were not entered as the data team regarded it as the original data which they have already entered. This communication breakdown raised a lot of queries as some additions from the verifications were not taken into the data base but this was later addressed during the mop up.

Some data entry clerks cloud mark the registration forms as if they have been incorporated into the data base when they have not. This was discovered during the verifications and delayed the verification process.

Verifications

Below are the challenges that were encountered during the verifications.

- Late departure for verifications despite advising the team that they have to depart for the verification centres before eight in the morning. Late departures affected the verification attendance in that people could show up for the exercise and gave up thinking that the meeting has been cancelled.
- Despite the project procuring fuel drums to overcome the persistent fuel crisis in Malawi there were times when the stock ran out and we had to seek fuel on the black market.
- Poor patronage raised challenges on the distribution as beneficiaries could delegate since the roll call was for all the households registered including those who could not receive the nets. Once a person was told that his name was called he had the hope that he will receive come the distribution day but his name was missing because the distribution list only carried the names of only those who have been registered and will receive the nets.
- On occasions there was poor communication between the community and the health personnel (HSAs). Some HSAs who were entrusted to pass the information about the verification dates left out some villages and this made the verification team spend some time mobilising the villagers where this could not be possible the verification was rescheduled to another day.
- Where the registrations were not conducted as recommended there were a lot of adjustments especially in the number of sleeping spaces and the household members.
- Identification and allocation of villages to be verified in day. Villages to be verified in a day are supposed to be those that are close or follow the same flow in that the flow has to either be south to north, west to east, and north to south or east to west. Random selection is costly as time is wasted by transporting staff. The HSAs should be consulted on planning for verification cluster daily allocations.
- Another challenge that was posed during the verifications was lack of proper mechanisms placed to check the flow of data from the verification sites back to the data entry for updating the registers. This meant that some names were missed despite being collected for inclusion into the database the worst was when three whole villages were missed on the database roll.

Distribution

During the distribution phase, the following were the challenges that were encountered.

Late delivery of the nets to the health centres and the distribution points delayed the distribution process as such some villages were deferred to another day and it affected the distribution trail.

Despite mass purchases of fuel stocks, there were moments when the project exhausted the fuels and supply could not keep the projects running, in such cases the fleet were reduced till the fuel supplies normalised. During hard fuel shortage times the vehicles could be sent to field with less fuel to maintain timeliness and were then supplied with the fuel whilst in the field.

Figure 7: One volunteer from Microsoft assisting in refuelling a truck in the field.

Lack of communication on distribution dates in some areas delayed the process. The distribution plan was delivered to all the health centres. Some health personnel did not share the information with their colleagues hence the villagers were taken unaware, the staff mobilised the community and distributions were still carried out.

Recommendations

The project recommends the following measures to be put in place and acted upon for all future mass distributions:

- Village registrations should be conducted when orienting the HSAs and this should be verified with the Group Village Heads.
- Each HSAs should declare the villages under him at the start of the process.
- The role of the supervisors to be clearly outlined, no forms should be collected from the HSAs without the presence of the project team unless it is evident that they are conversant with the quality of the materials to be accepted.
- The HSAs should be paid their registration allowances after the verification so that that their performance in the process is completely assessed by the community.
- The supervisors with the project team to monitor the registrations.
- The number of the data entry clerks should tally with the work load if project timeliness is to be achieved.
- Data flow from the registration to data entry to verification and data entry again should be closely monitored.
- Every data entry clerk should be assigned a health centre to care of. Their payments should also be made after verifications also to appraise their performance.
- The verifications and distribution should have the supervisors who could record daily team challenges right from the field.
- The team have to leave for the field at 7 AM everyday.

- The nets have to reach the distribution point at around 6AM. When the nets arrive in good time it assists in mobilising the community.
- The nets should not stay at a health centre for over 3 days unless distribution is to take such a long time. Keeping the nets at the health centre for long exposes them to the risk of theft.
- Involvement of the HSAs during distribution should be limited; at no point should they be allowed to handle the nets. The community should handle the nets themselves.

When the nets arrive at the distribution point, they should be counted and allocated according to the village requirement. If at the distribution point there are four villages, the nets should be placed in four places with each village nets requirement. This will assist to identify where the nets have gone missing.

Loss of Nets and Potential Misuse

The team ensured that rigorous control measures were put in place to stop theft and misuse of nets. We identified a number of instances where HSAs attempted to get hold of nets by deliberately double-entering names in village registers. We also identified two ghost villages which had been created by HSAs. Kasadzu 1 village under Kandeu Health Centre has been confirmed as a ghost village (on the records provided by the Health Surveillance Assistants it had 44 households and required 79 nets). In fact in Kandeu there is a village called Kasadzu which had 111 households and required 202 nets- all these people received their nets and Kaasadzu 1 never existed. Then the other ghost village was Kadzombe village under Kampanje Health centre which had 23 households and required 48 nets according to the Health Surveillance Assistant's records.

We will track the correct and consistent usage of nets through follow-up surveys. All Olyset nets have a 'CU/AMF/Irish Aid' label sewn into them to aid identification. All nets are removed from their packaging and initialled at the point of distribution to reduce the temptation to re-sell them. To date the team have not come across any cases of nets being re-sold.

However PSI did seize 10 vests from a tailor which had been sewn out of 2 Permanets which were distributed as part of our work. The tailor did not disclose whether the nets had been given to him or whether he purchased them from somewhere else- he did however state that one Permanet could be used to make 5 vests. We will monitor this situation to see whether it is an isolated incident or cause for greater concern.

Annex 1

LOCAL DEVELOPMENT SUPPORT PROGRAMME

MALARIA CONTROL AND PREVENTION

HSA:.....

DATA COLLECTION FORM

Health Centre:..... GVH:..... VILLAGE:.....
T/A:.....

HH #	Name of HH head	Total # of people in House Hold	# of Beneficiaries		# of usable LLIN in the HH	# Of sleeping spaces in the	Total # of LLINs required	COMMENT
			U/ 5	O/5				
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
	TOTAL							

TABLE 5: DISTRIBUTION PLAN

CONCERN UNIVERSAL
NTCHEU MASS LLIN
DUSTRIBUTION

January 9 to February 11 distribution Plan

HEALTH CENTRE	SITE	DATE
KATSEKERA	BILLIATI	9-Jan
	KAKHOBWE	9
	MUSO	9
MZAMA	KAMBILONJO	9
	CHINGONI	9
	MALILI	9
	HODA	9
	MPANDO	9
	LIYADA	9
DZONZI MVAI	CHIBWEYA	9
	SONGAYI	9
	BEN GOLOMBE	9
	DZONZI MVAI	9
NSIPE	NSIPE	10
	GWEDEZA	10
	CHINGWALU	10
	PHEZA	10
	CHIMBEWA	10
	FULATILA	10
	DAMISON	10
	NGUYA	10
	CHIEPA	10
CHAMPITI	CHAMPITI	10
	NTHUMBI	11
	GWAUYA	11
	WANYEMBA	11
KAPENI	KANZATI	11
	KAMMWAMBA 1	11
	PESA	11
	JAMES	11
	KAINGA	11
	CHIKABADWA	11
	MPALALE	11
	ZIDANA	12
NTONDA	CHABWERA U/5	12

	PHAMBALA COURT	12
	KAMZINDA U/5	12
	MATALE	12
	FAITI	12
	NTONDA	12
	MADEYA	12
NAMISU	LIKUDZI U/5	12
	NAMISU H/C	12
	MATEME GROUND	13
	BUCHE SCHOOL	13
MATCHEREZA	GANGA WAKO	13
	MATCHEREZA RESOURCE CENTRE	13
	MOKHOTHO SCHOOL	13
	MINGONGOMWA SCHOOL	13
	MBAMBA SCHOOL	13
SENZANI	GVH MATALE	13
	MANZINI GROUND	13
	MANANI RESIDENCE	13
	CHITALE PRIMARY SCHOOL	14
	KIA GROUND	14
	CHIMPINI U/5	14
MIKOKE	TSIKULAMOWA	14
	MAUNI	14
	MKONDE 1	14
	TSIKULAMOWA 2	14
	KANDOTA	14
MANJAWIRA	MANJAWIRA	14
	MANJAWIRA PRIMARY SCHOOL	14
	NJUNGA 2	17
MSIYALUDZU	MSIYALUDZU HEALTH CENTRE	17
	KABWAZI SCHOOL	17
	KUYENDA SCHOOL	17
	TSEKA SCHHOL	17
	JAMITALI	17
	MALANDA	17
	KUTHAKWA ANASI	17
	BAWI POST OFFICE	17
	GWAZA	17
	SILIYA	18
	KAME SCHOOL	18
BILILA	**CHAPALAPATA**	18
	MALINGWA	18
	MAJAMANDA	18
	TAMBALA SCHOOL	18
	MAJIGA 1	18

	KHOMERA CENTRE	18
	MKUTUMULA	18
	CHAULUKA	18
	GADA 1	19
	BILILA COURT	19
	HOLA GROUND	19
	PENGAPENGA	19
	KALUMBU	19
	MAJIRI	19
	AKUBILILA 1	19
	AKUBILLILA 2	19
DZUNJE	**MINEMO**	19
	MTSUNDULUZA SCHOOL	19
	KAMIZA	20
	WANYEMBA	20
	KAMZANGAZA	20
	NKHWAZI	20
	NKHWANI	20
	MAKWANGWALA	20
	KHUZI SCOOL	20
	CHIMATI SCHOOL	20
	KAWANGA SCHOOL	20
	MADZANJE	20
	SAIWA SCHOOL	23
	LIPENGA SCHOOL	23
BWANJE	BWANJE H/C	23
	CHIWIZA	23
	MPHOOLA SCHOOL	23
	CHITSULO	23
	CHIKADYA 3	23
	CHING'AMBA	23
	SANJANI KUMPHIKA	23
	MWADZA ANGATI	23
	CHAWANJE 1	24
	NJULI	24
SHARPEVALLEY	KAYIYA-NAMIKOKOTA	24
	ZALENGERA1-SHARP VALLEY ADMARC	24
	SAITI TIPUTIPU-LUSAPE PRIMARY SCOOL	24
	KULUNGA 1 PRIMARY SCHOOL	24
	AGABA GVH GROUND	24
	NDEMBO-CHISIMBWI SCHOOL	24
	ZALENGERA-NANSATO PRIMARY	24
KASINJE	NAMALE	24
	MANJANJA	25
	MCHOCHO	25

	MBULULU	25
	JUSHUA-KULILA SCHOOL	25
	MAFUWA CLINIC	25
	CHIFWIRI	25
	CHEUKA	25
	NASALA	25
	KAMBEWA CLINIC	25
	KAMGOMO-THOKO SCHOOL	25
	NJEREMA	26
	KALUMBU	26
	CHAULUKA	26
	KAMLANGIRA	26
	KANTANDILO	26
	AZUMBE	26
	MTAMBALIKA	26
	THUNGA1	26
	KAMPHEKO 1	26
	KASINJE HEALTH CENTRE	26
CHIOLE	ZIMENYANA	27
	KAMWENDO 1	27
	NACHIYE	27
	KAUWA	27
	CHIMWAYI	27
MPHEPOZINAYI	CHIMPUZA	27
	CHILUZI	27
	KADWALA	27
	CHIBALALA	27
	PANDULE	27
	KAPALAMULA	30
	CHAUTA	30
	NAMITENGO	30
	MPHEPO	30
	ZUZE	30
	NSUNGO	30
MULUMA	CHAKAZINGA	30
	MULUMA-FOOTBALL GROUND	30
	PHAKA FOOTBALL GROUND	30
	TCHAYA-FOOTBALL GROUND	30
GOWA	LIKUBWE SCHOOL	31
	MUWALO SCHOOL	31
	DIWIZA	31
	MAKHOYO-GROUND	31
	LIKUMBO COURT	31
	PFUKO GROUND	31
	GOWA HEALTH CENTRE	31
	SESANI GROUND	31

	KALUDZU GROUND	31
	KANGO'MBE GROUND	31
	TSAMULANI GROUND	1-Feb
	CHIPEZEYANI GROUND	1
KANDEU	GWAZA	1
	THAMBO SCHOOL	1
	ORPHAN	1
	ZAUNDA SCHOOL	1
	CHIDIKE GROUND	1
	KAMPHULUSA	1
	MATHOTHO GROUND	1
	KANDEU HEALTH CENTRE	1
	SAFUYAMA	2
	MUSO 1 SCHOOL	2
	NSALA GROUND	2
	LIVULEZI CLINIC	2
	CHALE 1	2
	NANDAYA GROUND	2
	MAGOMBWA	2
KAMPANJE	DAUKA	2
	MITCHI	2
	KATSETSE	2
	KAMPANJE 3	3
	KAMPANJE 1 HEALTH CENTRE	3
	TCHONA	3
	MABENA	3
CHIGODI	CHINGUWO GROUND	3
	NAMALE SCHOOL	3
	NAMALE (UPC)	3
	MAGOMBO (ACMC)	3
	CHOGODI FP SCHOOL	3
	ZINTAMBILA	3
MASASA	KALIMA 2	6
	CHAPITA	6
	KALIMA 1	6
	KAMPANIKIZA	6
	CHIMVULA	6
MLANDA	MPUSADALA	6
	CHIPHIKIRA	6
	NJINGAPANGA	6
	BALAMU	6
	MATANJE	6
LIZULU	CHILOBWE	7
	CHIBONGA	7
	MALUZA	7
	MKOLIMBO	7

	MZANANI 1	7
	MAPILA	7
	LIZULU	7
LAKE VIEW	NJOLOMOLE	7
	CHIKHAMWAZI	7
	KABWAZI SCHOOL	7
	KALITSILO	8
MLANGENI	WAIYATSA CLINIC	8
	CHIKULI OUT REACH	8
	KALAZI	8
	THANGANYIKA	8
BIRIWIRI	KANYIMBO SCHOOL	8
	KADZAKALOWA	8
	SATUMBA SCHOOL	8
	KASAMBA	8
	KAMUUZENI GROUND	8
	BIRILA RC CHURCH	9
	CHIPUSILE	9
	CHIPULA	9
	BIRIWIRI	9
NTCHEU BOMA	KABANGO GROUND	9
	KALUMBI SCHOOL	9
	MANDA A GOMANI	9
	NKHANDE RTC	9
	COMMUNITY HALL	9
	KASALA 1	9
	KANJATI	10
	CHITIPI CHURCH RC	10
	ZIPIRANA	10
	GOMEZA	10
	MULUKU	10
	GWAZA	10
	BANGALA SCHOOL	10
	GUMBU GROUND	10
	DC LINES GROUND	10
	NENEKEZA GROUND	10
	MACHIRA VH GROUND	11
	KANZINGENI VH GROUND	11
	MASTEMALE CBO GROUND	11
	MASTEMALE CBO GROUND	11

LLIN DISTRIBUTION REPORT FOR NTCHEU TOWN

Ntcheu District, Malawi

Carried out by Concern Universal with Ntcheu District Council

LLINs Provided by Against Malaria Foundation

Distribution funded by Irish Aid, Malawi

April 2012

Introduction

The report covers the nets distributed at Ntcheu town which were the final part of the Universal Distribution of Long Lasting Insecticide Treated Nets (LLINs) across Ntcheu District. This distribution was conducted in the last week of March and the first weeks of April 2012 when the project received an additional 16,574 LLINs from AMF.

The process started with re-orientation and formulation and dissemination of a distribution plan with the health workers (Health Surveillance Assistants and Area Supervisors). This took place in the last week of March with distribution commencing in the first week of April. There were 40 Health Surveillance Assistants and 7 Area Supervisors who were involved during the distribution. Ntcheu town distribution of nets was a continuation from the previous exercise so it was based on the data collected during November and December 2011

.

NET DISTRIBUTION

Ntcheu town has 53 villages that were targeted for the net distribution. The first wave of actual distribution took three days from 02/04/2012 to 04/04/2012. During this distribution 24,040 LLINs were distributed- leaving a balance of 1,509. The distribution went smoothly in most areas apart for at the Community Hall and DC Lines sites. Both these sites are at the centre of Ntcheu town and the distribution noted that there had been significant population movement since the original registration and verification was carried out. This meant that a good number of people whose names were on the list were not present and that there were a lot of people who wanted nets whose names were not registered.

Table 1 Total Distribution Data by villages before mop -up at Ntcheu town

No	SITE NAME	# OF VILLAGES	PROJECTED NETS	DISTRIBUTED NETS	BALANCE
1	KABANGO	2	859	859	0
2	KALUMBU SCHOOL	3	682	682	0
3	MANDA AGOMANI	3	902	902	0
4	NKHANDE RTC	5	616	616	0
5	COMMUNITY HALL	2	6105	4789	1316
6	DC LINES	4	1871	1678	193
7	GUMBU GROUND	4	3385	3385	0
8	KASALE	3	1298	1298	0
9	KANJATI	2	1261	1261	0
10	CHITIPA CHURCH	2	262	262	0
11	ZIIPILANA	3	634	634	0
12	GOMEZA	1	538	538	0
13	MACHILA	2	726	726	0
14	KANZINGENI	2	2107	2107	0
15	CBO GROUND	1	351	351	0
16	CHITUNGU	4	1121	1121	0
17	NENEKEZA	2	553	553	0
18	MALUKU	2	247	247	0

19	GWAZA	3	789	789	0
20	BANGALA SCHOOL	2	1242	1242	0
	TOTAL	**52**	**25549**	**24040**	**1509**

MOP UP DISTRIBUTIONS

After the three days distribution at the Ntcheu town the team conducted a re-registration and verification exercise at the two sites (Community Hall and DC Lines) which was then followed by a mop-up distribution. The remaining 1,509 LLINs were distributed during this mop-up leading to a final distribution total of 25,549 LLINs in Ntcheu town as originally planned. The detail for the LLINs distributed is set out in the table below.

Table 2 Final Total Distribution Data by villages at Ntcheu town

No	SITE NAME	# OF VILLAGES	PROJECTED NETS	DISTRIBUTED NETS	BALANCE
1	KABANGO	2	859	859	0
2	KALUMBU SCHOOL	3	682	682	0
3	MANDA AGOMANI	3	902	902	0
4	NKHANDE RTC	5	616	616	0
5	COMMUNITY HALL	3	6105	6105	0
6	DC LINES	4	1871	1871	0
7	GUMBU GROUND	4	3385	3385	0
8	KASALE	3	1298	1298	0
9	KANJATI	2	1261	1261	0
10	CHITIPA CHURCH	2	262	262	0
11	ZIIPILANA	3	634	634	0
12	GOMEZA	1	538	538	0
13	MACHILA	2	726	726	0
14	KANZINGENI	2	2107	2107	0
15	CBO GROUND	1	351	351	0
16	CHITUNGU	4	1121	1121	0
17	NENEKEZA	2	553	553	0
18	MALUKU	2	247	247	0
19	GWAZA	3	789	789	0
20	BANGALA SCHOOL	2	1242	1242	0
	TOTAL	**53**	**25549**	**25549**	**0**

Table 3: Planned Distribution April 2012 Ntcheu District Hospital

Health Centre	Number of villages	Number of households	Population	Number of sleeping spaces	Usable LLIN in place	Nets required
Ntcheu D. Hospital	53	10,102	45,432	26,973	1,424	25,549

POSITIVE ASPECTS OF THE NTCHEU TOWN LLIN DISTRIBUTION

- All the villages that were not reached before have now been reached with LLINs meaning that we have achieved universal coverage in Ntcheu District.
- There was good participation from all the stakeholders. The district supported the activity with personnel during the pre and post distribution activities.
- There were no reported cases of LLINs missing during and before distribution.
- Re-orientation of local leaders, volunteers and health workers from the targeted villages made a lot of people aware of the activity leading to good turn-out at the distribution sites.

CHALLENGES & EXPERIENCES

- These were big villages which could have been separated into smaller clusters for distribution purposes- this would have eased logistics.
- At the centre of town there had been more migration among households with people moving from one area of the town to another and this led to delay and confusion as people reported to their current location (where there name didn't appear) rather than going to the location where they had been registered.

RECOMMENDATIONS

- When conducting distributions in urban and peri-urban areas big villages should be divided further into smaller clusters to ease the logistics of distribution.

- In urban areas it is important not to leave a long time between registration and distribution because of household movements.