LLIN Distribution Programme – Detailed Information



## Summary

# of LLINS	Country	Location	When	By whom
10,560	Sierra Leone	Malen Chiefdom, Pujehun District	Jun-Aug '10	Global Minimum

### **Further Information**

1. Please describe the specific locations & villages to receive nets and the number to each? Please provide longitude/latitude information. (Important note: If the distribution is approved, approval will be for the nets to be distribution to these specific locations. Location changes will only be considered, and may be refused, if due to exceptional/unforeseen circumstances.)

Our distribution will take place in the Malen Chiefdom in Pujehun District. Pujehun Town has the following coordinates: Latitude (DMS): 8° 30' 0 N Longitude (DMS): 11° 13' 0 W (Source: traveljournals.com)

Distribution sites.

Section	Hub Village	Est. Pop	Nets	% tot. of chfdom pop
Kahaimoh	Nyandehun	3,846	1,930	16.3
Kakpanda	Taninahun	3,331	1,670	14.1
Upper Pemba	Manowulo	2,392	1,200	10.1
Lower Pemba	Gboyama	1,843	920	7.8

We are considering redoing Sahn Malen town. Est. pop: 1,800. Est. Nets: 900 Total Population Est.: 13212 Total Nets: 6620

Map attached with other details. Our estimates are based on a 1 net per 2 people since on average, a sleeping space has 2 people.

### 2. Is this an urban or rural area and how many people live in this specific area?

The Malen Chiefdom is a rural area situated about 90 minutes west of Pujehun Town. The estimated population of the chiefdom is 23,520. The chiefdom has 10 sections and we will be working in four of these sections with an estimated population of 11,412. The smallest of the ten sections has 1,637 inhabitants and the largest has 3,846. Locals are engaged in sustenance farming.

#### 3. Is this a high risk malaria area? If yes, why do you designate it as high?

Yes. The Sierra Leone is a malaria endemic region, but this area also has many rivers, swamps and irrigated fields for rice farming. Thus, this is an optimal breeding location for mosquitoes. In addition, local people consider malaria a very significant problem. The UNICEF-developed Multi-Indicator Cluster Survey for the Pujehun region puts the malaria prevalence rate at 35-45%.

This past summer, the DHMT team conducted a Rapid Diagnostic Test that indicated that 87% of all five year olds were positive with malaria in 5 villages. The average prevalence rate for all under-fives was nearly 50%.

#### Further:

Malaria is a big problem in the area - indeed malaria prevention is a need identified by our local partners. To add further evidence we will quote the District Health Management Team (DHMT) on the malaria prevalence in our target community. They work there year-round and witness every day the debilitating effect of malaria. The quoted report was prepared for a distribution Global Minimum undertook in the Sahn Malen village in the Malen chiefdom:

"Malaria is the leading cause of morbidity and mortality among the population in Pujehun district, with an estimated prevalence rate of 35%-45% (MICS 3). Pujehun constitutes one of the 13 Medical Districts in Sierra Leone as well as one of the four districts in the southern province. Pujehun district covers a total surface area of 4,105 square kilometers and harbours a population of 234,234 (Statistics Sierra Leone). population, which resides This in 12 chiefdoms, is mostlycomprised of rural inhabitants. Malaria is endemic in Pujehun district and normally assumes the highest peak of prevalence in the rainy season."

"Sahn Malen is ideal for the proposed study [of the effectiveness of ITNs] due to the following reasons: Firstly the topography of Sahn Malen is conducive for active transmission of malaria (swamps, depressed areas, oil palm plantation, forest and grassland vegetation). Secondly, Sahn Malen has a Community Health Centre (CHC) that has been with adequate amounts of drugs including stocked antimalarials. The centre, which is manned by staff of the Ministry of Heath and Sanitation (MOHS), provides services through the general clinic, Antenatal Clinic (ANC) and Underfives Clinic (UFC). There is a functional Community Development Committee (CDC) and Traditional Birth Attendants (TBA) are actively working with clinic staff. Thirdly, community participation in the delivery of health care services is remarkable. Lastly, Sahn Malen is a very good example of a typical community undergoing post war reconstruction and rehabilitation. Health service delivery is headed by the District Health Management Team (DHMT) in Pujehun. Partners working with the DHMT are mainly UNICEF and the Pujehun District council (PDC). There are no NGOs operating in the health sector at the moment."

This time Global Minimum aims to cover the remaining villages in the Malen Chiefdom, which are situated in exactly the same topographical conditions and thus suffer the same problems of malaria. If anything, this topography will cause a higher malaria prevalence rate in the Malen chiefdom than in the rest of the Pujehun region.

We have ample scientific evidence that malaria is a problem in the area. This evidence is collected and presented by the head government health team working in the region, the DHMT.

Also:

Pujehun constitutes one of the 13 Medical Districts in Sierra Leone as well as one of the four districts in the southern province. Pujehun district covers a total surface area of 4,105 square kilometers with a population of 234,234 (Statistics Sierra Leone). This population, which resides in 12 chiefdoms, mostly comprises of rural inhabitants.

Malaria is the leading cause of morbidity and mortality among the population in Pujehun district, with an estimated prevalence rate of 35%-45% (MICS 3).

The chiefdom in question is the Malen Chiefdom, which if anything has a higher prevalence rate than the rest of the Pujehun district.

4. Baseline malaria case information. How many <u>reported</u> cases of malaria and malaria deaths were there in this <u>specific</u> area in the most recent period available? We are looking for data from health clinics in the area. Month by month information is strongly preferred. We are NOT looking for regional level/national level information. Please cite your source. Baseline malaria case information forms the basis of comparison post-distribution.

We do not possess statistics for this since most common fevers are attributed to malaria so getting any precise statistics would be difficult.

During the last project, we had access to journals kept by representatives of the DHMT that indicated a high malaria prevalence / reported cases especially since the Government decided to make malaria drugs free (though people have to pay for other medications like paracetamol for lowering fevers.) Furthermore, at every home we visited, there was either someone sick with malaria or a child who had died in the previous couple of weeks from malaria.

5. Is this distribution of nets 'blanket coverage' of an area/village or to a select/vulnerable group? If the latter, please describe this group.

100% coverage. We consider a mosquito net distribution a community project and do not wish to exclude any groups. By covering everyone we also aim to harness the mass effect of a collective usage rate above 60 %. We maintain close to 90% usage rate at the moment for a project we completed in 2007 in Sahn Malen town.

# 6. What is the existing level of ITN use in this area? Are there existing bednet distribution programmes in this area?

We surveyed all the villages where we distributed nets in July 2009 and we found that there were 1,759 nets available for 8,891 inhabitants. Most of what people called "nets" were linens and other materials attached over their beds. Many of the real nets were torn, however, and only a handful of them were treated with insecticide. We anticipate the level of ITN use in other villages would be the same or lower in these places we hope to work in.

Determining net usage:

The DHMT does random sampling by interviewing 400 individuals (out of a population of 1500) to create a representative sample. In case of under-fives, their mothers or caretakers were used as proxy. They do these interviews every six months, and they have recorded a sustained 90% average usage rate 2 years after the first distribution by Global Minimum.

As noted earlier, the community participation in the delivery of health care services is remarkable in this chiefdom and the DHMT is able to combine this project with their other activities in the chiefdom.

Other net distributions in the area:

The DHMT has no record of other NGOs working in the area. The Red Cross has previously carried out a nation-wide distribution, but the nets have not reached the population of Malen. We have worked in the region on two separate occasions now including last year's partnership with the AMF.

From looking at the Roll Back Malaria website it is clear that the Pujehun district is not covered by the Global Fund's work:

http://www.rollbackmalaria.org/countryaction/sierraLeone.html
#expand\_node

According to this link, the only other ITN distribution partner is UNICEF who we already collaborate with.

7. Why was the area/villages chosen for bednet distribution and who made this decision? Please provide the name, position and organisation of the person/s making the decision.

The family of the former executive director and now President of Global Minimum, David Sengeh, hails from this region of Sierra Leone. He visited the chiefdom during the summer of 2006 and personally witnessed the brutal consequences of living in a malaria endemic area. After consulting with the paramount chief and the District Health Management Team (DHMT), he started Global Minimum with 3 of his friends to address this problem. David Moinina Sengeh Degree Candidate in Biomedical Engineering Harvard School of Engineering and Applied Sciences 490 Currier Mail Center, 64 Linnaean St., Cambridge, MA, 02138-1502 USA Email: dsengeh AT fas.harvard.edu Cell: +1-617-999-4319

This community is chosen for scientific reasons (high prevalence of malaria) and due to the fact that we are able to work closely with the target community.

As seen in our answer to question 3, malaria is from an official source established as a big problem in the region in general and in the chiefdom in particular. The fact that we have a very good working relationship with the paramount chief, the District Health Management Team as well as great knowledge of local customs and culture only improves the effectiveness of our distribution.

This expert knowledge due to familial relations should not detract from the effectiveness of our distribution, but rather add to it. This distribution is a case of Sierra Leoneans addressing their own problems, and they have chosen to focus on the problem that a lot of scientific evidence suggests is the biggest in their country. Global Minimum has many Sierra Leonean members and the other international members are more than happy to help them acquire the means (ITNS) to face one of Sierra Leone's many challenges.

Furthermore, given our previous success in the region and to continue with our method of distribution, it makes sense to continue with the upper half of the chiefdom for optimal results.

8. Have you consulted with the country's National Malaria Programme about this distribution and what was their response? Please provide the name, position and contact details of the person/s with whom you have liaised.

For our first project in 2007, the national malaria program was not very responsive, but they did not disapprove of the distribution. However, for the July 2009 distribution, Samuel Baker, the National Malaria Control Programme Manager, and his team were very involved with our work. They provided us with the vehicles to transport the nets from Freetown, storage space in Freetown, a supply of rapid diagnostic tests, and drugs for people who tested positive during the research and more. We collaborated at all levels with them and shared our data with them to avoid distributions in the same areas.

They are aware of and have approved our plans to continue distributions in the upper half of Malen in 2010 and they will use this information for any distributions they plan in the next couple of months.

Contact information for Dr. S.H. Baker; Tel: +232 76 640137, +232 33 408855, +232 77 558962 Email: sambaker79 AT yahoo.com or sambaker79 AT gmail.com 9. Please give the name and contact information for the (government) head of the district health management team for the/each area. Please ensure you include contact information.

Dr. Musa. He lives in Pujehun Town and works at the district hospital there. Email: <u>dhmtpujehun AT gmail.com</u>. We are in regular contact with Dr Musa and he has indicated that he along with his team will continue to work with us on future distributions.

10. Please confirm the nets will be distributed free-to-recipients, a requirement for us to fund nets.

Yes, they will. This was our principle in 2007 and 2009 and it continues to be our principle now.

11. Please describe all **pre-distribution activity**, including how the size of the target group and number of nets required will be ascertained and how the local community and leaders will be involved in this phase of the work?

As we did during our distribution in 2007 and 2009, we will do a census and visit each home in each village. We will mark each house with chalk i.e. "C3" - section C of the village house no. 3. This will allow us to carry out an efficient distribution and give us an opportunity to introduce ourselves to the people of the project village. We will ask how many 'sleeping spaces' they have and set aside that amount of mosquito nets for the subsequent distribution. This way we don't give two nets to a couple that sleeps in one bed.

We will also call a town meeting and introduce ourselves alongside the paramount chief, the Red Cross and the DHMT with whom we work. We will also continue our tradition of having a soccer tournament that will publicize the distribution and make us known to younger segments of the population. This aspect is sponsored by a similar tournament hosted at Harvard University by the Club soccer team.

12. Please describe how the bednets will be distributed and by whom. Please give detail. Please indicate over what time period (typically, the number of days or weeks) the distribution will occur.

We will distribute nets house-to-house. As in 2007 and 2009, we will split each village into three or four sections and create teams composed of members of GMin, local translators, Red Cross members and local volunteers. We will visit each house in the village and explain how the nets are used properly, how they are best hung up, what their effect is, the importance of sleeping under an ITN every night, as well as the transmission cycle of the malaria parasite.

We will help the people hang the nets if necessary (and provide nails and hooks where needed).

Malaria education will thus take place as we visit each house, but the district health medical team and the Red Cross will also do ongoing sensitization after the project ends - as they are currently doing for our previous net distribution.

We covered 1,500 people in one week in 2007 and 8,891 people in 2009 in 4 weeks so we estimate that the distribution of 6,000 nets will take 6 weeks. We will do pre-distribution work in the June and then finish the distribution by the end of July.

# 13. Please describe the malaria education component of the distribution. Please give a detailed answer.

As part of the main town meeting where the introductions are made, we will have a malaria skit acted out by locals as we did in last summer's distribution. A make shift bed is set up on stage. The actor goes to bed without mosquito nets and mosquitoes (human actors) come around and bite the person sleeping. A couple minutes later, the person wakes up and finds out that they have fever. They act malaria symptoms, get really sick and eventually die dramatically. And then the same character wakes up from the dead and now sleeps under a mosquito net. The same mosquitoes come back buzzing but they all die when they touch the nets. The person sleeping wakes up, and jumps around to show how healthy and strong they are. Furthermore, we also add other insects to show that the LLIN does not only kill mosquitoes but also bed bugs. There is a narrative in mende and questions asked by the Red Cross volunteer that the locals respond to as the skit takes place.

At homes, we often reference different parts of the skit and everyone, including the kids, remembers specifics of the messages from the skit.

14. Please confirm: a) you will conduct **immediate post-distribution follow-up** to assess the level of usage (hang-up %) of the nets; b) this take place within four weeks of the distribution; c) you will provide us with the findings.

We will have a post-distribution follow-up planned for every village starting immediately and going on for 3 years afterwards. This data will be shared with the AMF and all of our partners and donors.

15. Please confirm you will send a **Post-Distribution Summary** when the distribution is complete.\*\*

Yes, we will send a post-distribution summary when the distribution is complete.

16. Please confirm you will send us, post-distribution, at least 60 digital photos <u>per</u> <u>sub-location\*</u>, taken at the distribution/s, to be added to our website as we report on the distribution to donors.\*\*

Yes, we will. In 2007 we took more than a thousand pictures for a single distribution. Last summer, we fulfilled this requirement and we will do the same again. We realized that it was a great experience trying to document every detail of the project. 17. Please confirm you will provide at least 15 minutes video footage from each sublocation. It does not need to be 'broadcast' quality and can be taken with a handheld digital video camera.\*\*

Yes, we will. We fulfilled this promise as well last summer and we will do the same for the next and all future distributions.

18. Please confirm: you will carry out **longer-term Post-Distribution Reviews** (PDRs)\*\* to assess the level of usage (hang-up %), correct usage and condition of the nets; b) this will take place 6, 18, 30 and 42 months after the distribution of the nets; c) you will provide us with the findings.

We will have a post-distribution follow-up planned for every village starting immediately and going on for 3 years afterwards. This data will be shared with the AMF and all of our partners and donors. Presently, we get the data on a monthly basis.

19. Please provide your name, role and organisation and full contact information.

David Sengeh Co-founder and President of Global Minimum Global Minimum is a non-profit registered in New Jersey and in Denmark.

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\*Sub-locations are mutually agreed and are typically a portion of the total distribution ie A 20,000 net distribution, for photo and video reporting purposes, might be divided into 5 sub-locations. \*\*Information on the provision of photos, video, Post-distribution Summary and Post-Distribution Reviews is included in the attached document. Ends— YOU!



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