

Distribution report (Pre-distribution report at end detailing sites of distribution)

World Swim Against Malaria Malaika Project, Nyamuswa, Tanzania

Distribution: from 30/10/07 to 09/11/07

Number of nets: 2020 (WSM) + 57 = 2077

Participants:

Max Madoro (Nyamuswa, Tanzania) and Stephanie Wilmore (London, UK): coordinators and applicants to Against Malaria Foundation

Leader in the field: Max Madoro

Other Zinduka members: Blasius Ogolla, Vice Chair for Zinduka and Hamis Athuman, Zinduka's Coordinator for Project Zawadi in Nyamuswa (child education sponsoring project based in US) were present at all times. Max, Ogalla and Hamis were all present at all sites of distribution at all times. They travelled with the nets and driver together to all sites.

Malaria District Coordinator: Mr Fadhil present at beginning of distribution.

Driver: Mr Shukrani

Funding:

- 1) Against Malaria Foundation donated 2020 Long Lasting Insecticide Treated Bednets (LLINs)
- 2) Mr Kigezo Monge, a Malaika Project supporter and businessman originally from Nyamuswa donated 57 LLINs in addition to the 2020 provided by AMF
- 3) Quinton Fivelman donated £350 for transport costs on behalf of London School of Hygiene and Tropical Medicine (LSHTM)

Summary:

Zinduka:

Zinduka Development Initiative Forum (ZDIF) is a registered charity and local NGO based in Nyamuswa, a small village in the Mara District in the Chamriho Division of Eastern Tanzania. Zinduka is run by Max Madoro, Executive Director of Zinduka and Bunda District Councillor and Nyamuswa representative.

Transport:

A Toyota Landcruiser belonging to the District Council for Bunda was used for the distribution. This was free of charge because the government approved of this distribution and encouraged our contribution to the fight against malaria. Many thanks to the District Executive Director, Mr Essau Sigalla, Box 126, Bunda.

Petrol:

TSh 2000 per Litre. Total amounts in Litres (L)

Driver's allowances: TSh 40,000 per day.

400L from Mwanza to different distribution points = 800 000

Driver's allowances 5 days = 200 000

Stationary (photocopies etc) = 20 000

TOTAL = 1 020 000

Amount raised by Quinton Fivelman at LSHTM = £350 = TSh 7 675 500

Zinduka microfinance project contributed TSh 252 500.

Nets:

-1,360 OLYSET 160x180x150 SQ white nets

-660 OLYSET 6x6x7 SQ white nets (larger nets)

The tax invoice/delivery note was received and signed by Max on the 28th October 2007 in Mwanza. The nets were delivered to the Director of Sunpharm Pharmacy Ltd., Mr Nyiriza Makongoro, cell phone +255 754 312 650.

Recipients:

Table 1:

No.	FULL NAME	Title	Institution/Group	Date	# of nets
1.	Julius Magoti	CO i/c	Ikizu Health center	30/10/07	30
2.	Werema Mhono	H/M	Makongoro secondary	30/10/07	50
3.	Dr. R.M. Magessa	Moi/c	Butiama Hospital	31/10/07	100
4.	Simon Arego	H/M	Ikizu High School	31/10/07	910
5.	Erastus Majogoro	H/M	Olympus School	31/10/07	300
6.	Mstapha Maarifa	S/Men	Bunda DD Hospital	31/10/07	200
7.	Abdul Ndaikya	A/DMO	Manyamanyama H/C	31/10/07	70
8.	Anna Bijara	C/lady	Bupla – Bunda	01/11/07	30
9.	Faustine Joseph	C/man	Shdepha + Bunda	01/11/07	80
10.	John Makunja	H/M	Kisangwa VTC	01/11/07	50
11.	Dr. B. Mkande	Moi/c	Kibara Hospital	08/11/07	80
12.	M. K. Matambo	H/M	Kibara secondary	08/11/07	150
13.	Aloyce Bwire	C/man	Nyamuswa Drama	09/11/07	15
14.	Sigera Sigera	C/man	HIV victims Nyamuswa	09/11/07	12
	TOTAL				2077

Abbreviations:

- CO i/c = Clinical Officer in charge
- H/M = Head Master
- Moi/c = Medical Officer in charge
- S/Men = Storesman
- A/DMO = Acting District Medical Officer
- C/lady = Chairlady
- C/man = Chairman

Education:

Max was in charge of education. He gave a speech at every individual place where the nets were distributed. One person for each institution was nominated and their name recorded (see table 1). It was made clear that each nominated person would be in charge of ensuring that holes are sewed up and that the nets were always in place when a patient or a student used it and left the institution (health center or school respectively). Max explained the following crucial points at every single distribution:

1. Nets were FREE. There was never any money involved or exchanged between distributors and recipients.

2. Nets already have insecticide in the fibres: they do not need to be treated. They can be washed many times without having to retreat them. By the time they need retreating they would already be 3 to 4 years old and would be better off replaced by then because they may have many holes. The insecticide wears off after about 4 years.
3. The nets must be used ALL YEAR. They must stay on the beds where they have been allocated. No patient from any of the health centers and no boarding student from any of the boarding schools is allowed to take the net home with them. The nets are for the beds, not for the individual to keep.
4. Sew up any holes at all times.
5. Volunteers from Zinduka will be returning in a few months to check that the nets are still there and well used. This is the post-distribution follow-up. and it will certainly be done as it is part of the World Swim contract.
6. Zinduka and Malaika volunteers have worked very hard for this and we believe that it will be beneficial for the community. Treated nets are the best measure to prevent malaria and we want to be sure that they are not stolen or sold. If this happens we will never be trusted by donors again and will not be able to provide further assistance to Nyamuswa Ward or to any other community.
7. There are other measures against malaria. It is important to recognise the symptoms of malaria (fever, headache, sweats, vomiting, drowsiness, fitting), seek medical help EARLY, comply with appropriate treatment for as long as recommended by health professional, sleep under a treated net at all times, do not leave water round the compound, cut grass round the compound and clear rubbish round the compound.

All these points were discussed at length at the different places. The recipients, in particular the students were very interested and asked many questions. The distribution that Stephanie had carried out in Kenya with Rosie Crane allowed me to predict which questions would be asked again here. Stephanie was able to discuss the issues that she had encountered with Max so he was well prepared. He did not encounter any difficulties when asked questions. We have been working with treated mosquito nets since June 2005.

Difficulties:

The main problem, causing delay to the whole distribution after successfully securing the 2020 AMF nets, was funding the transport. Misunderstandings about transport, seemingly broken promises and delays in delivery throughout the summer led to the distribution happening in the absence of Malaika Project volunteers which had been the original plan. These prepared the pre-distribution report (see below)

Details of each institution and its recipients are outlined below in Pre-Distribution Report.

Pre-Distribution Report (June-July 2007)

Long Lasting Insecticide Treated Bednet Distribution

Bunda & Musoma rural districts

Mara Region

Tanzania, East Africa

June – July 2007

Sponsored by: Against Malaria Foundation
 World Swim Against Malaria

Distribution by: Malaika Project, based in Massachusetts, USA
 Project Coordinator: Jennifer Howland, MD (USA)
 Malaria Project Coordinator: Stephanie Wilmore (UK)
 Volunteers 2007:

 Allana Krolikowski (USA), June & July

 Davina Patel (UK), June

 Shreya Patel (UK), June

 Aadarsh Shah (UK), June

 Harriet Riall (UK), July

 Olivia Cleevely (UK), July

 Jelena Markovic (Serbia), July

Zinduka Development Initiatives Forum, Nyamuswa, Tanzania

Zinduka Executive Director: Max Madoro

POPULATION STATISTICS

Year 2006:

<i>Village</i>	<i>Households</i>	<i>Total People</i>	<i>Under 1 year</i>	<i>Under 5 years</i>
Nyamuswa	522	3437	137	687
Makongoro	384	2664	107	533
Kiroreli	503	3907	156	781

*Data taken from: Ikizu Health Center in Nyamuswa

Year 2007:

<i>Village</i>	<i>Households</i>	<i>Total People</i>	<i>Under 1 year</i>	<i>Under 5 years</i>
Nyamuswa	515	3499	140	700
Makongoro	374	2712	108	542
Kiroreli	546	3978	159	796
Kibara		10789	432	2158
Namibu		3000	120	600
Bunda		20647		
Nyasura		11529		
Kungumse		3689		
Bitara		3861		
Manyamanyama		2588		
Kitaramana		2190		
Kiwasi		1332		

*Data obtained from: Ikizu Health Center in Nyamuswa, Bunda
Kibara Hospital in Kibara, Bunda
Manyamanyama Health Center in Manyamanyama, Bunda

=Methods of obtaining these data are currently unknown

I) OLYMPUS BOARDING SCHOOL (just outside Bunda)

Pre-distribution

- i. Date: 22 June 2007
- ii. Nets
 - Amount allotted: 300
 - Number & condition of current nets: students are told to bring their own nets but it is not enforced, exact current number is not available
- iii. Location
 - Private primary school for standard 1 – 7
 - Established in 2002
 - Students: 455 total (430 boarders)
 - a. Come from surrounding areas and as far as Dar Es Salaam to go to school here
 - b. Good standard of English
 - Beds/dormitories: bunk beds in good condition, approximately 14 beds/room, separate male and female dorms
 - Health care: closest location is Bunda
 - Cost: (3 terms/year)
 - a. Boarders: 185,000 Tsh / term
 - b. Day-schoolers: 125,000 Tsh / term
 - c. Uniforms: 87,500 total
 - d. If students cannot pay, they cannot stay
 - Contact: Leah Kihogo, owner & member of board of directors
- iv. Final thoughts: As this is a private school and all students must pay their fees to attend, it appears as if bringing a net would be an affordable expense, but we do not know the homes that the students come from and at least this way, many students will have a net to sleep under. Any current nets can be left at home for another family member. Further education on sowing up nets when they get holes would be useful education.

II) IKIZU HIGH SCHOOL (in Bukama, 5km from Nyamuswa)

Pre-distribution

- i. Date: 12 June 2007 & 26 June 2007
- ii. Nets
 - Amount allotted: 910
 - Number & condition of current nets: students are told to bring their own nets but it is not enforced, exact current number of nets is not available
- iii. Location
 - Private secondary school and high school for forms 1-6 run by Seventh Day Adventists
 - Established in 1911
 - Students: 992 total students (approx. 980 boarders)
 - Beds/dormitories: bunk beds in fair condition, 14-36 beds/room, separate male and female dorms
 - Health care: local dispensary on school grounds, Ikizu Health Center in Nyamuswa

- Cost
 - a. Boarders: 380,000 Tsh / annum
 - b. Day schoolers: 220,000 Tsh / annum
 - c. Competitive entry (approx. 33% acceptance)
 - Contact: S. Arego, headmaster phone #: 0754-98-59-26
- iv. Final thoughts: This was reported to us as a secondary and high school with high standards; students consistently perform well on national exams. We were told that students are educated on the prevention of malaria but many still do not bring nets although the exact reason is unclear. We were well received and the nets will be appreciated especially as this is a highly infectious malarial area (as it is surrounded by open fields). Some students are eager to share and exchange ideas with people of other cultures due to “the emergence of globalization.” Students are free all day on Sundays and after 2PM on weekdays.

III) KISANGWA VOCATIONAL TRAINING SCHOOL (15km from Nyamuswa)

Pre-distribution

- i. Date: 21 June 2007
- ii. Nets
 - Amount allotted: 40
 - Number & condition of current nets: students are told to bring their own nets but it is not enforced, exact current number is not available
- iii. Location
 - Focal development college at which students study for 2 years: carpentry, masonry, tailory, domestic science, agriculture, electrical installation (upcoming for when the school gets electricity)
 - Established in 1954 as a middle school and subsequently in 1977 as the college
 - Students: 34 current students, in August more will join and is projected to be between 45 and 50 students
 - Beds/dormitories: single beds (36 total) and bunk beds all in poor condition, up to 4 beds (bunked) in one room
 - Health care: closest health center is in Bunda
 - Cost (unknown)
 - Contact: Azarea Roswe, acting principal
- iv. Final thoughts: This is clearly a school with very limited financial resources. The school apparently has not seen much renovation since its initial formation in 1954. This is a very valuable allotment of nets, especially as the school is planted in what appears to be a highly infectious malarial area. Education on how to control mosquito breeding grounds would possibly be worthwhile and efficacious.

IV) KIBARA SECONDARY SCHOOL (in Kibara, 70km from Bunda)

Pre-distribution

- i. Date: 21 June 2007
- ii. Nets
 - Amount allotted: 150
 - Number & condition of current nets: students are told to bring their own nets but it is not enforced, exact current number is not available

iii. Location

- Government secondary school for forms 1-4 (expecting to expand to include forms 5 and 6 in the next year)
 - Established in 1996
 - Students: 468 total students (164 boarders)
 - Beds/dormitories: bunk beds in poor condition, mattresses are very flimsy
 - Health care: closest location is Kibara Hospital
 - Cost:
 - a. Boarders: 155,000 Tsh / term
 - b. Day schoolers: 70,000 Tsh / term
 - c. Many students come without paying full fees, they cannot be forced to leave due to governmental policy
 - Contact: Simeon Machumu, headmaster
- iv. Final thoughts: This appears to be a very poorly funded school and many students likely come from disadvantaged backgrounds. The students will clearly benefit from the nets, especially as Kibara is located along Lake Victoria and has many mosquitoes. There appears to be a distinct need for educating people in this region about the transmission of malaria. Prevention is not currently viewed as a priority in part because the people believe that they “live by the hand of God.”

V- IKIZU HEALTH CENTER (in Nyamuswa)

Pre-distribution

Date: 12 June 2007 & 19 June 2007

Nets:

Amount allotted: 30

Number & condition of current nets: none and no financial provision is available

Location:

Governmental run health center

Staff: 18 government salaried employees (1 head officer, 3 clinical officers, 1 health officer, 1 lab technician, 8 nurses, 1 night watchman, 1 assistant, 2 cooks)

Facilities:

- a. Maternal & Child Health (education, postnatal care, vaccines: measles, BCG, DPT)
- b. Women & Pediatric Ward (up to 60 people in winter)
- c. Laboratory (poor condition, can check for malaria and worms)
- d. Wards for men and women

Beds: currently 21 plus mattresses on floor in poor condition, beds all together (no patient isolation), animals walking around, patients frequently share beds

Population served: Nyamuswa, Makongoro, Kiroreli, and surrounding villages

Issues identified by staff: no patient isolation, lack of equipment, no transport to Bunda for emergency cases, lack of water

Contact: Dr. Chrysostom Mbonamengi, head officer

Final thoughts: This is a very poorly financed health center that serves a large population. People with more money in the village go to Bunda DDH for

better medical resources. The provision of nets for this location will be much appreciated and only a small step in what is needed by this center to function well.

V) MANYAMANYAMA HEALTH CENTER (in Manyamanyama, 5km from Bunda)

Pre-distribution

- i. Date: 22 June 2007
- ii. Nets:
 - Amount allotted: 50
 - Number & condition of current nets: approx. 2-5 nets which are old and torn, no further financial provision is available
- iii. Location:
 - Government run health center established in 1976
 - Staff: 44 total
 - Facilities:
 - a. Will expand to be a DDH but it will probably take at least 1 year, beds will be increased to 200 beds
 - b. Very minimal medicine
 - c. Few beds in wards, often two patients share each bed
 - d. Pediatric ward and storage are in the same building
 - e. Funded by government and some donors
 - Beds: 50 beds in fair condition and up to ten people sleep on the floor
 - Population served: Bunda, Nyasura, Kungumse, Bitara, Manyamanyama, Kitaramana, Kiwasi, western Musoma rural district, (estimated at over 70,000 people)
 - Contact: Dr. Amos Manya, clinical officer in charge
- iv. Final thoughts: This appears to largely be an under funded health center aside from the new building financed by a member of Parliament from the Musoma rural district. There are new buildings in construction, though, for the expansion to a DDH. The current 50 allotted nets will be well received and are clearly needed although this will leave the center with only $\frac{1}{4}$ coverage once the expansion to 200 beds takes place. For now, this is a good location to receive LLNs.

VI) BUNDA DDH (in Bunda)

Pre-distribution

- i. Date: 22 June 2007
- ii. Nets:
 - Amount allotted: 200
 - Number & condition of current nets: none and no financial provision is available
- iii. Location:
 - Designated District Hospital (DDH) run by Lutheran Church (established in 1992) and the government, soon it will separate from the government and become privately owned and functioning
 - Staff: less than 130 total (full capacity is 180), workers are moving from private to public sector
 - Facilities:
 - a. Clean hospital with many wards
 - b. A sink present for every six beds

- c. Isolation rooms present; many ICU patients; open TB ward
 - Beds: 200 beds in good condition with overhead capacity to hook a bednet, good quality mattresses
 - Population served: Bunda and surrounding areas, exact coverage unknown
 - Issues identified by staff: financial and staff shortages
 - Contact: Dr. David Sinde, head medical officer
- iv. Final thoughts: This is a large and widely used medical facility that appears to have a fair capacity to care for a variety of illnesses and surgical needs. It is under funded by the government and will be facing further financial issues once it becomes solely private; its initial private funding from a large donor has expired. This appears to be a good institution to which to donate LLNs.

VII) KIBARA HOSPITAL (in Kibara, 70km from Bunda)

Pre-distribution

- i. Date: 21 June 2007
- ii. Nets:
 - Amount allotted: 100
 - Number & condition of current nets: 30 old nets, many with holes, no further financial provision is available
- iii. Location:
 - Private hospital run by the Roman Catholic Church in the Dioceses of Musoma (70km from Bunda, 140km from Musoma)
 - Staff: salaried by the church
 - Facilities:
 - a. Relatively clean hospital with various wards
 - b. Separate rooms for patients with infectious disease
 - c. Have 2 autoclaves and space for preparing sterile IV fluids
 - d. Sparse resources for obstetrical care
 - Beds: 100 beds in fair condition
 - Population served: Kibara, Namibu, and surrounding villages (over 43 villages)
 - Contact: Stephan Magazo, matron
- iv. Final thoughts: This hospital is one of two in the Bunda district and lies along Lake Victoria. It is clearly in need of nets and will benefit from the donated LLNs. Malaria is especially problematic in this area due to its location on the lakeshore. The staff is very welcoming and the hospital appears to be well run. It is lacking many resources from a global perspective but it is one of the better supplied hospitals in the district.

VIII) BUTIAMA HOSPITAL (in Butiama, 15km from Nyamuswa)

Pre-distribution

- i. Date: 26 June 2007
- ii. Nets:
 - Amount allotted: 100

- Number & condition of current nets: approx. 40-50 nets that appear to be old and worn but which are well kept (clean and few holes), no further financial provision is available
- iii. Location:
- Government hospital in Musoma rural district (only hospital in a district that should have 2-3) established in 1972
 - Staff: 60 total
 - Facilities:
 - a. Appears to be well organized and well kept
 - b. Works as a DDH but is not officially announced as such (thus lacks funding and staff)
 - c. Theater for minor and major operations
 - d. Large maternity ward & various other wards
 - Beds: appears to have less than 100 beds although exact number is unavailable and was reported as 100, in fair condition but close together and no patient isolation
 - Population served: entire Musoma rural district
 - Contact: Dr. Mageso, medical officer in charge
- iv. Final thoughts: This is the only distribution site not located in the Bunda district but it is a deserving institution as they have a large target population. The current nets are worn and new nets will be useful; it seems that they will be well kept for a long time. The hospital serves a large rural population especially affected by malaria.

IX) NYAMUSWA DRAMA GROUP (in Nyamuswa)

Pre-distribution

- i. Date: 20 June 2007 & 22 June 2007
- ii. Nets
 - Amount allotted: 15
 - Number & condition of current nets: members who currently have nets say they are worn, old, and have holes; members come from very poor families
- iii. Description
 - Group of young adults who perform educational plays, especially on malaria and AIDS, in the village center
 - Members: currently there are 5 regular members as others are working or taking care of young children
 - Practice: they rehearse three times per week at the local AMREF building owned by a carpenter
 - Assets:
 - a. Have red t-shirts as uniforms (purchased in June 2007)
 - b. Have 3 drums to call people to their performances
 - c. Paid 1,000 Tsh each by Zinduka DIF for their performances; they are supposed to perform twice per month (in theory)
 - Issues identified by group:
 - a. Desire 5 new drums (estimated to cost 60,000 Tsh total)
 - b. State low personal capital as a hindrance for people to join and then stay involved in the group
 - Contact: Aloyce Bwire, group coordinator

- iv. Final thoughts: This group provides invaluable education for people in Nyamuswa from a local's perspective that the people respond to. They deserve LLNs to protect themselves and do not individually have the capital to purchase nets. They may not need all 15 allotted as the group has decreased in size.

X) BUNDA AIDS PATIENTS (in Bunda)

Pre-distribution

- i. Date: 23 June 2007
- ii. Shdepha
 - Nets
 - a. Amount allotted: 80
 - b. Number & condition of current nets: unknown, people do not have financial means to purchase nets
 - Description
 - a. Group of HIV/AIDS victims in Bunda open to the community for support and education, established in 2000
 - b. Members: currently estimated at 220 total
 - c. Visit victims' homes for support and seek to educate the community, will consider future involvement in education in the schools
 - d. Had various questions about malaria transmission
 - e. Contact:
- iii. Bupla (Bunda People Living positively with HIV/AIDS)
 - Nets
 - a. Amount allotted: 30
 - b. Number & condition of current nets: unknown, people do not have financial means to purchase nets
 - Description
 - a. Group of HIV/AIDS victims in Bunda open to Bunda and surrounding communities for education, established in 2005
 - b. Members: 30 active members
 - c. Hold community meetings to educate people on HIV/AIDS
 - d. Visible office near Bunda center
 - e. Contact:
- iv. Final thoughts: These are very vulnerable populations in Bunda who are doing great work in the community. As they have very limited financial resources, these are good groups to which to donate LLNs.

XI) NYAMUSWA AIDS PATIENTS (in Nyamuswa)

Pre-distribution

- i. Date: 25 June 2007
- ii. Nets
 - Amount allotted: 12
 - Number & condition of current nets: approx. 2-3, people do not have financial means to purchase nets for themselves and their families
- iii. Description

- People with HIV/AIDS who have identified themselves to Zinduka DIF
 - Number at meeting: 5 women
 - These women do not belong to a particular group but are seeking as much help with their condition as possible.
 - There still exists much stigma in Nyamuswa toward HIV/AIDS victims and there is poor education. For example, some people think HIV can be spread by mosquitoes.
 - Had questions about how to protect their future children, in particular while in utero
 - Contact: Amos, Zinduka HIV/AIDS coordinator
- iv. Final thoughts: These women are very brave in this small community to come forward and seek help for and knowledge about HIV/AIDS. They have very limited financial resources and will benefit greatly from the LLNs. Distribution of the nets to the homes of these women will provide an opportunity to educate some community members about HIV/AIDS as people will question why these particular women are receiving assistance.