Diébougou LLIN Distribution Campaign Burkina Faso 30<sup>th</sup> June to 2<sup>nd</sup> July 2009

# Post distribution report



#### Introduction

During June and July 2009 the Burkina Faso Red Cross led a campaign to distribute 67, 700 LLINs (long lasting insecticide treated nets) in the Health District of Diébougou, Burkina Faso. 40,000 of these nets were donated by the Against Malaria Foundation (AMF).

This was the first ever "universal" distribution of mosquito nets, where the aim is for an entire population to have access to an LLIN, not just a targeted high risk group, such as pregnant women and children under 5. This is to make sure that if possible every sleeping space is covered by an impregnated mosquito net so that the cycle of malaria transmission can be broken. Impregnated nets do not just protect the person sleeping under the net but also due to the insecticide within the net, protects others not under nets in close proximity because they kill and repel mosquitoes. It is important to have as many impregnated nets being used as possible so that the killing and repelling effect of the insecticide is maximised. When nets are given to specific groups there are sometimes not sufficient impregnated nets to make sure that anyone not using a net in the near vicinity is fully protected from malaria.

Diébougou Health District encompasses the same boundaries as Bourigouiba Province in South West of Burkina Faso, part of the Health District borders with Ghana (see map below). The health district is named after its only town Diébougou, in the rest of the area people live in the countryside or in small villages mostly as subsistence farmers.



In 2006 Burkina Faso had a population of 14 538 160 people. It is a landlocked country with borders with Mali, Ivory Coast, Ghana, Togo, Benin and Niger. About 90% of the population are subsistence farmers with 46.4% living below the poverty line (CIA World Factbook).

Malaria is a major public health problem and causes a great economic burden on the country which is already one of the poorest in the world. In Diébougou, malaria transmission is constant throughout the year with a seasonal peak in cases between May and October, during the rainy season. Malaria is also the primary cause of medical consultation, hospitalisation and cause of death in medical facilities. In 2007 nationally malaria caused:

- 40.8% of medical consultations
- 52.6% of reasons for hospitalisations
- 44.6% of deaths in health facilities
- 52.1% of deaths in children under five years old

The Red Cross coordinated all planning efforts with the Burkina Faso Ministry of Health (National Malaria Control Program) and their representatives at regional and district level. Other partners included WHO, UNICEF, Plan and JICA.

For the Ministry of Health, the promotion, distribution and correct use of LLINs forms a major part of its strategy to reduce malaria morbidity and mortality, especially among pregnant women and children under five years old. In 2005 they conducted a survey which found that:

- 32.6% of households owned a mosquito net (any type)
- 27.5% of pregnant women used an impregnated net
- 23.8% of children under five years old used an impregnated net

In 2010 the Ministry of Health will carry out a universal distribution of LLINs to the entire population of Burkina Faso to ensure that at least 80% of the population sleeps under an impregnated net. Diébougou is being used to pilot the strategy for this.

### The Strategy

One net will be provided for every two people in each household with odd numbers rounded up so, for example, a household of 7 people would receive 4 LLINs. The objective is for every sleeping space to be covered by an LLIN. The nets were distributed at the beginning of the rainy season before malaria cases peak.

Diébougou lies on the main road between Ouagadougou (the capital of Burkina Faso) and Ivory Coast. Therefore, the 4 hour drive from Ouagadougou to Diébougou is on relatively good tarmac roads. It is not possible to buy LLINs in the shops in Diébougou and most people cannot afford to buy them. Most people if they have a net have one that has been sewn locally and is not impregnated as it also not possible to by insecticide for treating or retreating mosquito nets in the health district.

Diébougou was chosen as a good place to pilot universal coverage of LLINs as:

- There had not been a previous mass free LLIN distribution there before
- It is situated in a zone of stable malaria transmission
- With the number of LLINs available the IFRC were able to attain universal coverage of the population in the health district
- The zone is accessible by a tarmac road
- There is good capacity for community volunteers both Red Cross and community health workers.

There were three phases to the distribution campaign in Diébougou

- Registration of households
- LLIN distribution
- Post distribution "Hang Up"

## Training

For the activities the 32 supervisors received two trainings one regarding the registration and distribution phase over 3 days and the second regarding Hang Up activities for 2 days. The volunteers received three trainings each one just before the start of the different phases. It was important to stagger the trainings as the activities required at each phase were specific and it ensured that key messages were not forgotten over the period of the distribution.



(Picture: Vouchers (that have been redeemed) one showing the holder to be eligible for 1 net the other for 2 nets)

#### Registration

Before the campaign the total population of Diébougou was thought to be 102,165 people enabling 100% of the population to be covered by the original total of 60,000 LLINs. Three weeks before the distribution and having received the first of their trainings the 336 community based volunteers mobilised by the Red Cross conducted door to door visits of every household in Diébougou. They counted and recorded how many people lived in each household and hand out a voucher specifying the number of nets to be provided per household. The volunteers also talked to householders about the causes of malaria, its symptoms, how to treat malaria and how to prevent it by using an LLIN. They also informed people where and when they could redeem their voucher for their LLINs.

In total they counted 23, 927 households with total population being over 120,000. It was clear the 60,000 nets were not going to be sufficient (40,000 from AMF and 20, 000 from International Federation of the Red Cross). The Burkina Faso Ministry of Health kindly provided an extra 7000 nets and UNICEF 700. This enabled the Red Cross to have the sufficient LLINs at each distribution point.

Four days before the distribution trucks arrived from Ouagadougou and delivered the LLINs to the 13 CSPS's or community clinics before the distribution. From there they were delivered by donkey, bicycle and moped to the 161 distribution points throughout the district.

In addition to the door-to-door visits, the week before the distribution, local radios broadcast details of the distribution in three of the local languages.



(Picture Distribution in Loto)

#### Distribution

Between the 30<sup>th</sup> June and 2<sup>nd</sup> July representatives from 23 690 households (over 99%) turned out at distribution points to receive their household's allocation of LLINs. The distribution points opened early in the morning and people queued up with their vouchers, were registered and collected their nets.



(Picture: Women happy to have received their nets)

As they were handed their nets the volunteers opened the bags to help ensure that people would not then sell the nets. People were told to hang out their nets for 24 hours before they used them to prevent skin irritations from the insecticide and at each site there was a demonstration of how to hang a net.

The main problem was managing all the people queuing especially in Diébougou town. However this was rectified by the second day with the help of the local police. AMF nets were distributed in 71 of the 161 sites.



(Picture: An orderly queue at a distribution point)

#### Post campaign Hang Up

Hang Up is a strategy championed by the Red Cross to help ensure that people use their mosquito nets and know how to hang and use them correctly.

Four days after the end of the distribution the supervisors and volunteers received another training session. They then re visited every household in the Health District to ensure that all households had nets, helping those who had not yet suspended their nets to hang them correctly and showing them how to use it. The key messages were:

- Mosquito nets should be used nightly and year round
- They should be suspended so that people to not lean against them at night
- The bottom of the net should be tucked under the mattress or sleeping mat.

The volunteers also reinforced the messages that:

- Mosquito nets will prevent malaria
- Pregnant women and children were most susceptible to malaria
- Malaria symptoms
- If someone has these symptoms they should go to the local clinic or hospital as soon as possible (within 24hrs) to receive treatment.



(Picture: A volunteer conducting a Hang Up)

#### Impact

3 months on and talking to Justin Sondo who lives in a compound just over 5km from Diébougou town with his wife and 4 children, his mother, her co wife, his brother and his wife and children (18 in total) are a prime example of how the LLIN distribution has had a beneficial effect on their lives. Before the distribution of LLINs Justin himself would suffer from malaria twice or three times a year each time preventing him from being able to tend his maize and peanut crops which are his only income. His children however were far more susceptible to getting malaria and would be ill nearly once a month with the disease. Each time Justin would have to go to the pharmacy and buy medicines which although subsidised, cost him 300CFA or about 70 cents for basic treatment with ACTs. This is expensive for Justin who has to find something to sell every time he needs money, usually if he needs something he swaps it for some peanuts or a chicken but these are not accepted at the pharmacy. In January of last year Justin's 9 month old baby girl died of malaria, she was taken to hospital and treated but Justin could not afford to pay for the blood transfusion she needed and she died. Since receiving 9 LLINs during the distribution no one in Justin's compound has suffered from malaria because everyone now sleeps every night under an LLIN.



(Picture: Justin Sondo and most of his extended family in his compound with his nets)

Similarly talking to Amadou who is a nurse at the community clinic in Bapla, before the distribution he says that there were some children in the village that he used to see almost every 15 days with malaria but since the distribution of LLINs he has not seen them once. He thinks the whole community is now healthier because of the distribution and children suffer less from anaemia (a side effect of malaria).

N°     Community Clinics       1     BAMAKO       2	y Villages Bamako Kolépar Vokoum Diasser Tempé Mébar Konsabla Néborgane Barindja Navrèkpè	Total Pop.	Total LLINs	43 44 45 46 47	DANKOBLE	Tansié Balignar Sorgon		
2     3     4     5     6     7     8     9     10     11     12     BAPLA     13     14     15     16     17     18     20     21     22     23     24     25     26     27     28     29     COMMUNAI     30     31     32     33     34	Kolépar Vokoum Diasser Tempé Mébar Konsabla Néborgane Barindja			45 46		-		
2     3     4     5     6     7     8     9     10     11     12     BAPLA     13     14     15     16     17     18     9     20     21     22     23     24     25     26     27     28     29     COMMUNAI     30     31     32     33     34	Vokoum Diasser Tempé Mébar Konsabla Néborgane Barindja			46		-		
4     5     6     7     8     9     10     11     12     BAPLA     13     14     15     16     17     18     19     BONDIGUI     20     21     20     21     22     23     24     25     26     27     28     29     COMMUNAI     30     31     32     33     34	Vokoum Diasser Tempé Mébar Konsabla Néborgane Barindja							
5     6     7     8     9     10     11     12     BAPLA     13     14     15     16     17     18     19     BONDIGUI     20     21     22     23     24     25     26     27     28     29     COMMUNAI     30     31     32     33     34	Tempé Mébar Konsabla Néborgane Barindja			47	1	Mouviélo		
6     7     8     9     10     11     12     BAPLA     13     14     15     16     17     18     19     BONDIGUI     20     21     22     23     24     25     26     27     28     29     COMMUNAI     30     31     32     33     34	Mébar Konsabla Néborgane Barindja					Walbalé		
7     8     9     10     11     12     BAPLA     13     14     15     16     17     18     19     BONDIGUI     20     21     22     23     24     25     26     27     28     29     COMMUNAI     30     31     32     33     34	Mébar Konsabla Néborgane Barindja			48		Zopal		
8     9     10     11     12     BAPLA     13     14     15     16     17     18     20     21     22     23     24     25     26     27     28     29     COMMUNAI     30     31     32     33     34	Néborgane Barindja					Total	6424	3773
9     10     11     12   BAPLA     13     14     15     16     17     18     19   BONDIGUI     20     21     22     23     24     25     26     27     28     29     COMMUNAI     30     31     32     33     34	Barindja			49	DIASSARA	Diassara		
10     11     12   BAPLA     13     14     15     16     17     18     19   BONDIGUI     20     21     22     23     24     25     26     27     28     29     COMMUNAI     30     31     32     33     34	Barindja			50		Gbingué		
11     12   BAPLA     13	Navrèkpè			51		Kambélédaga		
12   BAPLA     13				52		Koursera		. <u></u>
13     14     15     16     17     18     19     BONDIGUI     20     21     22     23     24     25     26     27     28     29     COMMUNAI     30     31     32     33     34	Nipodja			53		Wérinkéra		
13     14     15     16     17     18     19     BONDIGUI     20     21     22     23     24     25     26     27     28     29     COMMUNAI     30     31     32     33     34	Total	9728	5713	54		Binté		
14     15     16     17     18     19   BONDIGUI     20     21     22     23     24     25     26     27     28     29     COMMUNAI     30     31     32     33     34	Bapla centre			55		Yéyéra		
15     16     17     18     19   BONDIGUI     20     21     22     23     24     25     26     27     28     29     COMMUNAL     30     31     32     33     34	Lokodia			56		Sarambour		
16     17     18     19   BONDIGUI     20     21     22     23     24     25     26     27     28     29     COMMUNAI     30     31     32     33     34	Moutori					Total	3701	2173
17     18     19   BONDIGUI     20     21     22     23     24     25     26     27     28     29     COMMUNAI     30     31     32     33     34	Ségré			57	NICEO	Nicéo		
18     19   BONDIGUI     20	Birifor			58		Hélélé		
19   BONDIGUI     20	Navielgane			59		Milpo		
20     21     22     23     24     25     26     27     28     29     COMMUNAL     30     31     32     33     34     35	Danko-Tanzou			60		Bohéro		
20     21     22     23     24     25     26     27     28     29     COMMUNAL     30     31     32     33     34     35	Total	11246	6605			Total	3678	1573
21     22     23     24     25     26     27     28     29     COMMUNAL     30     31     32     33     34     35	Bondigui			61	TIOYO	Tioyo		
22     23     24     25     26     27     28     29     COMMUNAI     30     31     32     33     34	Ouan			62		Kouro		
23     24     25     26     27     28     29     COMMUNAL     30     31     32     33     34     35	Sorindigui			63		Séhintiro		 I
24     25     26     27     28     29     COMMUNAL     30     31     32     33     34     35	Kobogo			64		Kpolo		I
25     26     27     28     29     COMMUNAL     30     31     32     33     34     35	Kpédia			65		Diébiro		
26     27     28     29   COMMUNAL     30     31     32     33     34     35	Diarkadougou			66		Balembiro		
27   28   29 COMMUNAL   30   31   32   33   34	Obro			67		Gnebissinao		
28 29 COMMUNAL 30 31 32 33 34 35	Mougué			68		Yellela		
29     COMMUNAL       30     31       32     33       34     35	Bonfesso			69		Tordiero		
30   31   32   33   34   35	Zanaw a			70		Tiakoura		
30   31   32   33   34   35	Total	8914	5235	71		Kolonkoura		
31   32   33   34   35	L Commune					Total	5092	2921
32 33 34 35	Kpakpara				TOTAL		69196	40000
33 34 35	Séouregane							
34 35	Loto							
35	Kpologo							
	Limalia							
	Niaba							
36	Moulé							
37	Tédia							
38	Yaoteong							
39	1							
40	Wapassi							
41	Djounkargou							
			12006					

## Table 1 Distribution and Fixed Points with Against Malaria Foundation Nets