



Summary

# of LLINS	Country	Location	When	By whom
12,000	Ghana	Navro-Pungu, Navrongo	Jun-Jul 08	Navrongo Health Research Centre

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.)

The Kassena-Nankana district is located in the northeast corner of northern Ghana and has a population of 148,885 (DSS April 2008). The LLINS will be distributed to the Pungu communities and communities 6km from the Navro-Pungu primary school with a population of 28,555.

The communities of Pungu are:

Gomongo/Wolongo-EBB, Gonum-EBC, Gonum/Chengo-EBD, Doosum-ECD, Bawio-NAD, Nyagua-NAE, Nyagua-NAF, Punyoro-NBA, Punyoro-Manchoro-NBB, Yitonia-NBC, Tekuru-NBD, Dimbasinia-NBE, Punyoro/Manchoro-NBF, Dimbasinia-NBG, Badunu-NDC, Samwu-NDD, Telania-NEA, Telania-NEB, Telania-NEC, Telania-Manchoro-NED, Tekuru-NEE, Tekuru-NEF, Bavugnia-Wusungu-NEG, Babili-Kayulu-NGF, , Kazugu-NDE, Tankuna/Kugwania-SAJ, Tankuna-SAK, Badania-SBA, Karania-SBB, Badania-SBD, Badania-SBE, Kansa-SBF, Bungum-SBG, Gooru-SCA, Lower & Upper Nangalkinia-SGS, Upper Nangalkinia-SGT, Bangania-WEB, Wuru-WED, Nawognia/Wuru-WEE, Namol/Nogsinia/Nawognia-WEF, Wuru/Nakalkinia-WEG, Jamangbia-WFD, Saboro-WFE, Saboro-WFF, Baniu-WFG.

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

The district has 90% of its population living in rural areas and the Navro-Pungu area is mainly rural.

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

Yes. Malaria occurs year round but high transmission season is between July-November. Innoculation rates of 418 infective bites per person year.

4. How many **reported cases of malaria** and **malaria deaths** were there in this area in 2005? If you do not have statistics please make a qualitative comment.

Total reported malaria cases in health facilities in the Kassena-Nankana District in 2006 was 23,110 and total malaria deaths among under fives was 33. However, the NHRC monitors

community deaths and there were 600 community deaths in 2006 most of which were malaria related.

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.

The total population of the selected communities as at 2007 is 28,555. The average household size is 5. This will however be a blanket coverage of all the communities in Pungu and communities 6km away from the Navro-Pungu primary school. There are 6,006 households and each will receive 2 LLINs.

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

A random survey of households with children under five in 2006 showed ITN use of 58%. In 2006, the National Malaria Control programme and UNICEF supplied 975 nets and 580 ITNs each to be sold at \$2.00 and \$0.54 to pregnant women and children under five respectively. About 11,575 nets were also retreated free of charge during the child promotion week in 2006. Source: DHMT Annual report 2006.

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.

A school in London solicited for funds to provide LLINs to the Navro-Pungu school communities.

8. Have you consulted with the National Malaria Programme in your country 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.

Yes. Dr. Constance Bart-Plange, Manager, National Malaria Control Programme, P. O. Box KB 493, Korle-Bu-Accra, Ghana.

9. Please describe any pre-distribution activity, in particular how the size of the target group and number of nets required will be ascertained?

The Navrongo Health Research Centre has a database of all households and its members in the district. This database is updated every four months. Each household and its members have a unique identity and the total population of 28,555 for the selected communities as well as the total number of households (6,066) was generated from this database.

10. Please describe how the bednets will be distributed, by whom, whether distribution will be a focussed effort or part of a combined programme and if there will be an information/education component to the distribution? Please indicate over what time period (typically, the number of days or weeks) the distribution will occur.

Previous ITN distribution has been community focused. Discussions are usually held with community leaders at durbars (large gatherings of community members) held with each community to discuss the distribution mechanisms and to provide information on the use of the nets. With the database, names by households will be printed and distribution will be done by community. The distribution will

be carried out by the Navrongo Health Research Centre. We will distribute to 2 or 3 clusters/communities per day. For a shorter distribution period, we will consider a community based distribution rather than house-to-house distribution. We have a database of households and we will generate this list for distribution in the community. Household heads will be made to thumb print or sign for nets they have received.

11. What [post-distribution follow-up](#) is planned to assess the level of usage (hang-up percentage) of the nets? How long after the distribution will this assessment take place? Will you provide us with the findings? What will you be able to do subsequently to increase net hang-up if relevant?

We plan to have a baseline survey of bednet use in these communities, understand the hanging practices and sensitize the communities. A follow up survey in Sep-Oct 2008 to assess the level of hanging and use during the peak transmission season. Reports on both surveys will be shared with you.

12. 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.

Ms. Rofina Asuru, District Health Administration, Kassena-Nankana District, Ghana Health Services, P. O. Box 8, UER-Ghana Fax: +233-742-22313

13. Please confirm the nets will be distributed [free-to-recipients](#), a requirement for us to fund nets.

Yes, the nets will be distributed free of charge.

14. Please confirm you will send us, post-distribution, at least [40 digital photos per sub-location](#), taken at the distribution/s, to be added to our website as we report on the distribution to donors.*

Yes, we have a Communications Unit covering these activities. Digital photos and video clips will be made available on durbars organized, the distribution and hanging practices.

15. Please indicate if you will be able to provide [video footage](#) from each sub-location. This is not mandatory but is preferred and aids reporting to donors and encourages further donor giving.*

Yes, video footage will be provided.

16. Please confirm you will send a [Post-Distribution Summary](#) when the distribution is complete.*

Yes, a post-distribution summary report by household and by community will be provided when the distribution is complete.

17. Please provide your name, role and organisation and [full contact information](#).

Dr. Patricia Akweongo, Social Scientist/Research Fellow
Navrongo Health Research Centre, PO Box 114, Navrongo, Ghana

*Information on providing photos, video and a Post-distribution Summary is included in the attached document.

Rob

I have responded to your questions below.

Patricia

Navrongo Health Research Centre

Re Q1: Can you indicate how many nets would go to each community? Can you provide a map showing the relative locations of the communities to each other? A sketch map would be fine if it is not possible to scan in and email me an already existing map. Can you let me know the latitude and longitude of Navro-Pungu? Could you also provide similar information i.e. additional communities if we were able to provide 10,000 LLINs? 10,000 LLINs might be possible.

Response:

1. Find attached a map of the clusters/communities. We have indicated on the map where the Navro-Pungu schools are situated and where the main district Hospital is (file: Pungu-map).

2. I have also attached information on the latitude and longitude on the whole of Pungu. The Navro-Pungu school areas are situated in Telania in clusters NEG and NED (file: Pung-lat-long).

3. We have added 9 communities/clusters to the 10 communities/clusters we sent earlier. All these communities make up Pungu. This now gives a total population of 11329 and 2381 households respectively (File: net-per-community).

4. The 10000 nets will go to 19 communities/clusters in the Pungu area and on average each household will receive 4 nets each (nets per community attached if 4 nets are distributed per household). We could however consider 2 two nets per household considering that in the last two years most children 0-2 years have received the UNICEF and National Malaria programme nets. Do you want us to go outside the Pungu area (the 19 communities) which is your focus?

NOTE: For the purpose of research activities by the Navrongo Health Research Centre, communities have been divided into clusters and a community can have several clusters. A cluster has 99 compounds and there are on average 2 households per compound. So if a community has more than 99 compounds, it will have several clusters.

Re Q4: You indicate the number of malaria cases in the district in 2006 was 23,110 and the total malaria deaths of under fives as 33. Was this the total number of recorded deaths? If not, can you let us know the total number?

Response: Most deaths occur at home in the Kassena-Nankana District and these deaths reported here are the health facility recorded malaria deaths for children under five.

Re Q5. You mention the phrase 'the Navro-Pungu school area'. Just so we are clear can you explain what this means/ perhaps the map requested in Q1 will answer this question as you will show the extent of this area and the communities included and nearby.

Response:

Navro-Pungu school area is the area in which the school is located and is in the Telania community, precisely cluster NED and NEG. However, Pungu is a very big area and the Telania community has only a population of 2858. The additional clusters we added to make up for the 5000 nets are all around the Navro-Pungu School area (see Map attached).

Re Q6: You indicate that ITN use was 58% in 2006. Is this before or after the 1,555 provided by the NMCP and Unicef? Do you suspect the use level in know higher a year or so later? Do you have more up to date data? Importantly, if usage levels are this high, does that not suggest that the number of nets required for 1,654 households (Q5) would be significantly lower – 60% lower – given Q5 seems to assume no nets already in place?

Response:

The 58% coverage was after the NMCP and Unicef net distribution. These nets were given to pregnant women and children 0-2 years between 2005 and 2006. We suspect net use might have been higher after the distribution. We don't have up more up to date information but the short survey before the distribution might offer us more information.

The number of nets (3 per household) we proposed was based on the fact that nets should not be distributed outside the Navro-Pungu area. Even in adding all the communities in Pungu with the additional 5000 nets each household will receive about 4 nets.

I want to propose that if it is OK can we distribute these nets to women who were/are pregnant or have children 0 to 1 year within the last year and the first quarter of this year. In that way we can distribute for the whole district. If this is not acceptable, and you do agree that we can even go outside Pungu, then we may consider adding the next villages outside Pungu for the distribution and we can propose 2 nets to a household.

Re Q8: Can this be done relatively quickly? We look forward to receiving the contact information requested.

Response: The Director will be in Accra next week and hopeful will try to contact the Director for NMCP on this.

Re Q10. Could you indicate over what time period 5,000 nets would be distributed? And if 10,000 nets? Could you provide a little more information on how the distribution is likely to occur ie a single distribution or multiple distribution points in each community? House to house distribution? Beyond the information on use on the nets would you have a malaria information and education component to the distribution and if so what would it include?

Response: A single distribution might not be possible because they live in dispersed settlements. We will distribute to 2 or 3 clusters/communities per day. For a shorter distribution period, we will consider a community based distribution rather than

house-to-house distribution. We have a database of households and we will generate this list for distribution in the community. Household heads will be made to thumb print or sign for nets they have received.

The district health Directorate have a malaria education programme and they will be involved in this exercise. In addition we will provide information on malaria biting patterns since we have recently gathered information on this.

Re Q11. Does this baseline survey mean that it is only when that information has been gathered would you be in a position to know how many nets should go to each community? And further, that that might mean 5,000 nets might be distributed across more communities than included here currently? This ties in with the comments re Q6 above. If so, can you indicate when you expect to have that baseline information? Our intention is to provide 5-10,000 nets and you will then be the best judge of where those are needed. I just wish to understand what geographic spread we might be looking at.

Response: Preferably, nets should be distributed after we have collected this information and this may require us to conduct bed net ownership and use information among a random sample of communities in the district. Based on that we can easily tell how many nets should go to each community/household. If that should happen, the survey would be in April and the distribution in May. It also depends on how quickly you can send down the nets.

Please could you make any text changes/additions on the document you sent (attached) in red so we can track them?

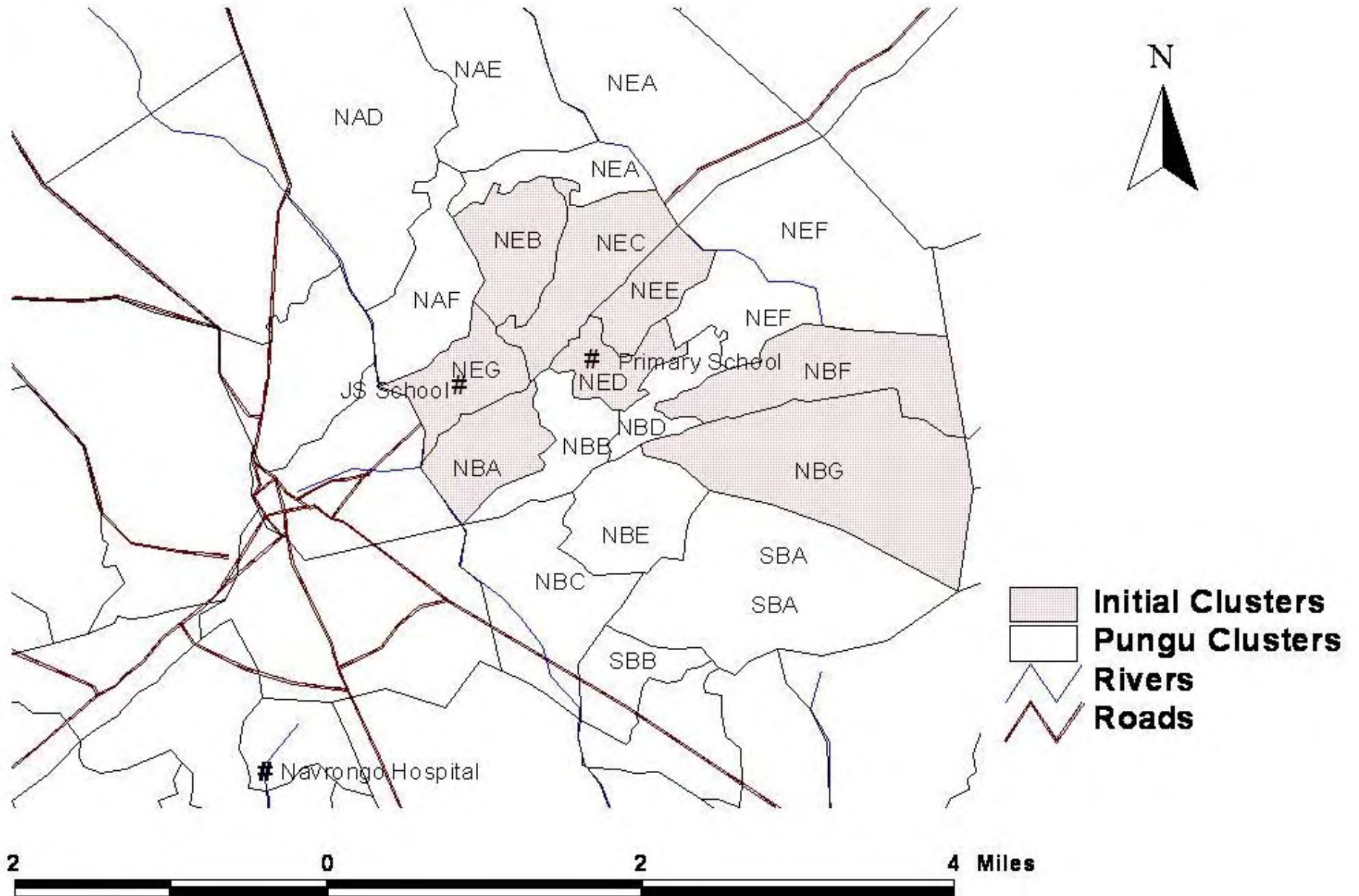
Re Q14 and Q15, just to clarify that a minimum of 40 photos are required per sublocation and at least 5 minutes of video footage per sublocation. A sublocation typically involves about 2,000 nets but it varies. In essence it is a geographically separate(ish) area. So if 1,500 nets were being distributed in one location, and 2,000 in another we would consider those sub-locations. There is more information on this below.

Which leads me onto 'admin'. We sign a Distribution Agreement with all our Distribution Partners and NHRC would be considered to be a Distribution Partner. All Distribution Partners sign this agreement. There is nothing particularly scary in the Agreement. I attach a pdf of the Agreement. Can you send me the information highlighted in yellow and I will add to a word document version and send you a copy for signature. FYI, all our distribution partners (not a closed list) are listed here: http://www.againstmalaria.com/en/Distribution_partners.aspx.

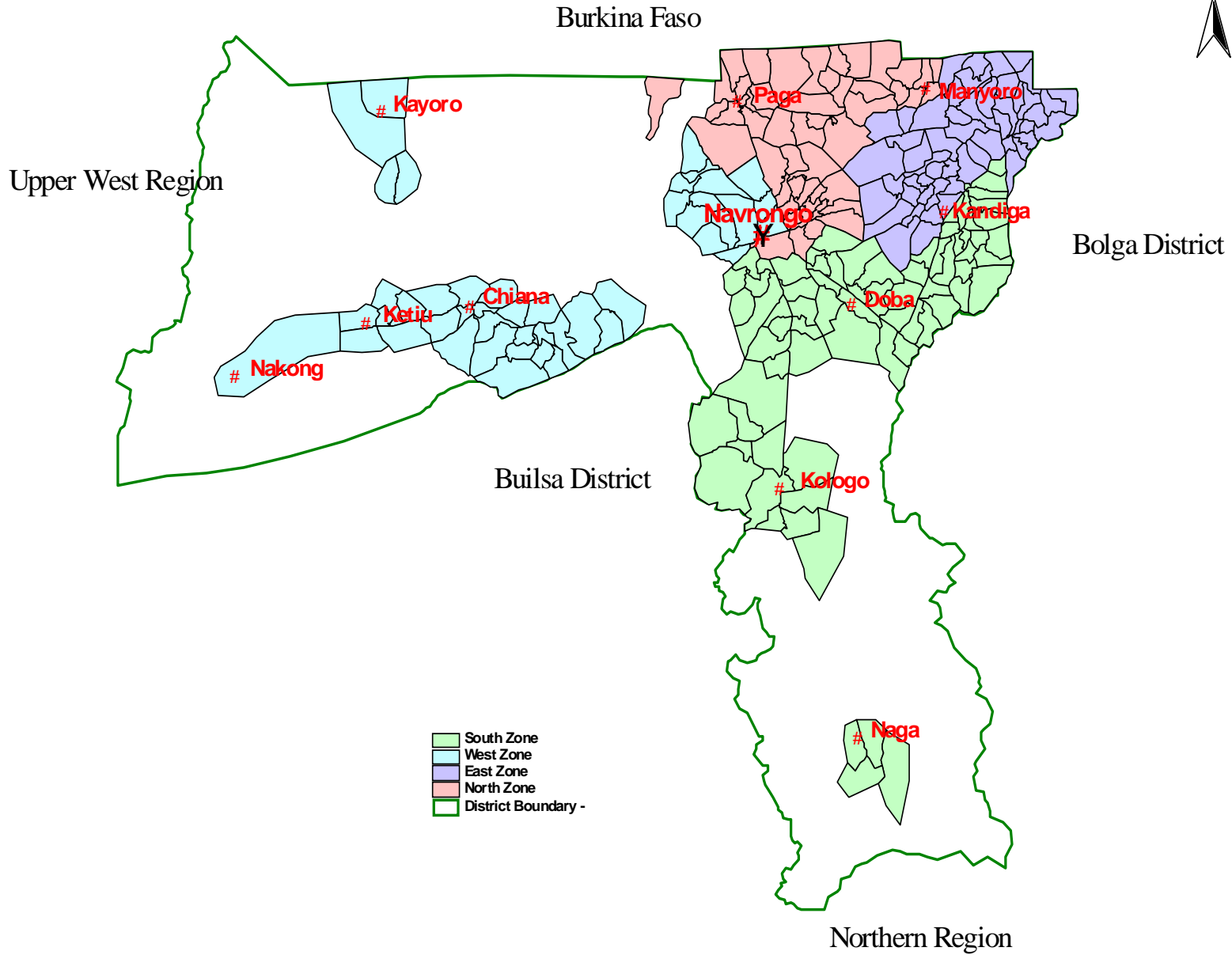
I look forward to hearing from you.

Best regards
Rob

Navro-Pungu Area of the Kassena-Nankana District



Kassena - Nankana District showing the major villages



Cluster	Community	Population	No. of Households	No. of Nets per Community*				
EBB	Apiya-Gomongo/Wolongo	550	101	202	202			
EBC	Gonum	492	81	162	162			
EBD	Gonum/Chengo	413	71	142	142			
ECD	Doosum	540	92	184	184			
NAD	Bawio	689	149	298			298	
NAE	Nyagua	734	154	308			308	
NAF	Nyagua	622	123	246			246	
NBA	Punyoro	537	112	224	224			
NBB	Punyoro/Manchoro	700	153	306	306			
NBC	Yitonia	714	159	318	318			
NBD	Tekuru	553	116	232	232			
NBE	Dimbasinia	476	94	188	188			
NBF	Punyoro/Manchoro	498	101	202	202			
NBG	Dimbasinia	557	99	198	198			
NDC	Badunu	542	108	216			216	
NDD	Samwu	797	163	326			326	
NDE	Kazugu	811	171	342			342	
NEA	Telania	553	123	246			246	
NEB	Telania	754	153	306			306	
NEC	Telania	721	158	316			316	
NED	Telania/Machoro	465	95	190			190	
NEE	Telania	362	83	166			166	
NEF	Tekuru	598	112	224			224	
NEG	Bavugnia-Wusungu	574	135	270			270	
NGF	Babili-Kayulu	818	158	316			316	
SAJ	Tankuna/Kugwania	681	164	328	328			
SAK	Tankuna	576	132	264	264			
SBA	Badania	761	167	334	334			
SBB	Karania	498	124	248	248			
SBD	Badania	583	126	252	252			
SBE	Badania	589	134	268	268			
SBF	Kansaa	723	143	286	286			
SBG	Bungum	446	86	172	172			
SCA	Gooru	518	103	206	206			
SGS	Upper & lower Nangalkinia	933	220	440	440			
SGT	Upper Nangalkinia	551	142	284	284			
WEB	Bangania	572	139	278		278		
WED	Wuru	728	135	270		270		
WEE	Nawogonia/Wuru	506	103	206		206		
WEF	Namolo/Nogsinia/Nawognia	792	182	364		364		
WEG	Wuru/Nakalkinia	681	150	298		298		
WFD	Jamangbia	502	118	236		236		
WFE	Saboro	740	148	296		296		
WFF	Saboro	849	185	370		370		
WFG	Baniu	744	231	462		462		
Total		28,043	5,996	11,990	3,082	2,358	2,780	3,770

The additional highlighted clusters are all 6km away from the Navro-Pungu area
The NAV additional clusters that were added for 4km have been taken out as they are considered to be urban Navrongo
The Centre has just completed an update of the district population through the quarterly DSS and hence
some of the population figures for some communities have changed a bit

Cluster Code	Community	Latitude	Longitude
EBB	Apia-Gomongo/Wolongo	10.93571489	-1.015832787
EBC	Gonum	10.91997742	-1.004988774
EBD	Gonum/Chengo	10.91179423	-1.016856559
ECD	Doosum	10.88852902	-1.00451712
NAD	Bawio	10.93065754	-1.083332258
NAE	Nyagua	10.93757112	-1.07162701
NAF	Nyagua	10.91419384	-1.076367153
NBA	Punyoro	10.90053094	-1.07080453
NBB	Punyoro/Manchoro	10.90291898	-1.061955261
NBC	Yitonia	10.88653108	-1.068069881
NBD	Tekuru	10.90775286	-1.053089973
NBE	Dimbasinia	10.89346453	-1.058481661
NBF	Punyoro/Manchoro	10.90838226	-1.041777352
NBG	Dimbasinia	10.89821248	-1.03619357
NDC	Badunu	10.95254326	-1.063398013
NDD	Samwu	10.95842316	-1.054172105
NDE	Kazugu	10.94539575	-1.038357675
NEA	Telania	10.93643737	-1.058202535
NEB	Telania	10.92113186	-1.068549624
NEC	Telania	10.91933244	-1.060787322
NED	Telania/Machoro	10.90885	-1.06015
NEE	Telania	10.91407087	-1.056935431
NEF	Tekuru	10.9206162	-1.043109758
NEG	Bavugnia-Wusungu	10.9075403	-1.0742949
NGF	Babili-Kayulu	10.94518473	-1.116107398
SAJ	Tankuna/Kugwania	10.86013071	-1.065192363
SAK	Tankuna	10.87371047	-1.075868659
SBA	Badania	10.89072314	-1.046366154
SBB	Karania	10.88015925	-1.059265744
SBC	Badania	10.86619746	-1.052735189
SBD	Badania	10.87520013	-1.052676787
SBE	Kansaa	10.8718701	-1.043590033
SBF	Bungum	10.87672509	-1.034030389
SBG	Gooru	10.85867607	-1.029594624
SGS	Upper & lower Nangalkinia	10.87768536	-1.099751889
SGT	Upper Nangalkinia	10.87487381	-1.090069425
WEB	Bangania	10.91268629	-1.126705236
WED	Wuru	10.88735098	-1.124348675
WEE	Nawogonia/Wuru	10.89700825	-1.113997745
WEF	Namolo/Nogsinia/Nawogonia	10.90032323	-1.101171738
WEG	Wuru/Nakalkinia	10.8818237	-1.107690849
WFD	Jamangbia	10.9208008	-1.122538308
WFE	Saboro	10.92564275	-1.101010931
WFF	Saboro	10.90883196	-1.088543286
WFG	Baniu	10.89704846	-1.084275957