

# ROTARIANS AGAINST MALARIA



## LONG LASTING INSECTICIDAL NET DISTRIBUTION REPORT

### JIWAKA PROVINCE Anglimp South Waghi and North Waghi Districts

Carried Out In Conjunction With The Provincial Government And Church  
Health Services Of Jiwaka Province

With Support From The Global Fund

**1<sup>st</sup> July to 6<sup>th</sup> September 2023**



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Annex One Detailed Distribution Data For Anglimp South Waghi District

Annex Two Detailed Distribution Data For South Waghi District

## Executive Summary

Jiwaka Province is a Highlands Province on the mainland of Papua New Guinea (PNG). It is made up of three districts of Anglimp South Waghi, Jimi and North Waghi. While it is a highlands province with mountains over 3,500 metres, it also has low lying areas going down to below 400 metres in Jimi District and below 800 metres in the South of Anglimp South Waghi. The low lying regions below 1200 metres are endemic for malaria while those areas above 2000m are malaria free. Areas between 1200-1600 metres are considered epidemic in nature but presentably malaria free. In reality, only about 2.5% of the population live in endemic malaria zones with about 39% lining in epidemic areas and 50% living in areas between 1600-2000 metres where malaria transmission (if it occurs) is limited to *Plasmodium vivax*. The rest of the population live in areas above 2000 metres where malaria does not occur. Practically the whole population of Anglimp South Waghi and North Waghi where net distribution occurred in 2023 are accessible by road with about 1% in the Mount Au area only accessible by plane (helicopter) and trekking.

During this program, the family level survey and distribution of Long-Lasting Insecticidal Nets (LLINs) was carried out in the districts of Anglimp South Waghi and North Waghi in areas below 1600m only between 26<sup>th</sup> June to 22<sup>nd</sup> July 2023. Table One shows the estimated population to be covered by the program together with the actual population found along with the number of LLINs distributed by district. In total, 115,654 LLINs were distributed to a population of 233,863 people. This resulted in distribution of 49.5 nets for every 100 people in the population given nets. Please note the people who received nets in these two districts represent about 52% if the population of these two districts.

**TABLE ONE – Population And Nets Distributed**

District	Population from 2000 Census	Population Of Targeted Areas In 2020	Total Estimated Population 2023	Population Surveyed 2023	House Holds Surveyed 2023	Nets Issued 2023	Nets Distributed Per 100 People
Anglimp South Waghi	96,570	117,130	127,991	131,691	26,776	65,110	49.4
North Waghi	69,498	86,003	93,978	102,172	19,613	50,544	49.5
<b>Totals</b>	<b>166,068</b>	<b>203,133</b>	<b>221,969</b>	<b>233,863</b>	<b>46,389</b>	<b>115,654</b>	<b>49.5</b>

A further 22 LLINs were donated to health centres for use for antenatal nets or for use over beds in the health facility. Donations only occurred where there were a few loose nets left or it was difficult to return the nets to the central stores in Mount Hagen.

The overall operational cost of the programme was 412,279.79 Kina (Approximately US\$ 114,522) resulting in a cost of about 3.56 Kina or US\$0.99 per net delivered. While this was about 9% over the anticipated budget, the cost of delivery is reasonably good considering the need to use helicopters into Mount Au as its airfield is no longer serviceable. The main extra costs were helicopters and car hire.

Other than this, overall, the distribution went well in Jiwaka Province with excellent collaboration from provincial and district health authorities which resulted in all targeted communities being eventually reached and all household receiving nets.

Feedback from partners and communities suggest they were happy with the methodology used as the process appeared transparent to all concerned. However, as always, there were a few families who complained that they did not receive enough nets but for the most part it is believed that this was a result of families not fully understanding the allocation system used.

Global Fund donated, supplied and covered all distribution costs for all the nets for Jiwaka Province. The nets distributed in Jiwaka Province were Duranet nets which came from India. This is a new type of net which is different from nets distributed in the past as it is made from polyethylene and we hope that this net will be more efficacious and longer lasting than nets supplied in the last few years.

The history of LLIN distribution in PNG and Jiwaka Province is discussed in Appendix One and the malaria situation and stratification of malaria in Jiwaka Province are discussed in Appendix Two and Appendix Three. Historically it can be said that LLINs have had a tremendous impact on malaria in Papua New Guinea but recent distributions in lower lying provinces have not resulted in decreased malaria except in the highlands of PNG where malaria appears to have been practically eliminated. We hope that these nets are sufficient to keep malaria at low levels in all these areas of Jiwaka for another three years.



**Fig.1 – Initial Planning Meeting With PHA (Left) And Microplanning Meeting At Minj HC (Right)**

## **Background**

Rotarians Against Malaria (RAM) is a nationally based organisation which was formed in 1997 by the Port Moresby Rotary Club in recognition of the tremendous burden that malaria imposes on the people of PNG.

RAM has an organizational mandate to work in malaria control and the distribution of LLINs in Papua New Guinea and has been working for many years with the National Department of Health (NDOH) and other partners including multilateral and bilateral agencies such as UNICEF and WHO (World Health Organisation), NGOs (Non Governmental Organisations) and church groups. (See Appendix One for full history of LLIN Distribution)

Since 2010, RAM has been coordinating the distribution of nets to all districts and provinces on a three-year recurrent cycle. This effectively means that RAM visits every targeted village in PNG every three years. RAM has been funded by the Global Fund since 2009 and from 2017 to 2020 also from Against Malaria Foundation (AMF) which supplied PNG with the majority of its nets in 2017 and from 2018 onwards to all areas below 1600m only where most of the malaria transmission can be found. During the period 2017 to 2020, the Global Fund resources were therefore mainly used to fund the LLIN distribution costs and other relevant administration costs. However, in 2020, PNG was also lucky to receive a donation of net from the Chinese Government and these were used for all areas between 1600-2000m of altitude.

It should also be noted that since 2015, the National Malaria Control Program no longer distributes nets in areas above 2000m as these altitudes are now considered too cold for

malaria transmission to occur. The situation has changed in 2021. AMF no longer is a donor to PNG and all costs have now reverted to Global Fund. With this change, RAM started to have difficulties covering areas from 1600-2000m but we are very fortunate in that the Global Fund allowed saving from 2020 to be used to procure nets for 2021 for this altitude. At present, the funding situation for LLIN distribution to altitudes of 1600-2000 after 2022 has stopped and it appears at this moment that all LLIN distributions in the future will be limited to below 1600m only.

Generally, LLINs have been distributed to household level throughout the country but when shortage of funds occurred, different strategies of distribution have been used as mentioned above.

PNG can be roughly divided into five epidemiological zones.

- a) Areas which lie above 2000m in altitude which no longer receive LLINs as malaria transmission is not considered likely at these altitudes.
- b) Low lying areas of the country up to 1200m which have stable malaria endemicity and often have poor access to health continue to have household distributions.
- c) Areas from 1200 to 1600m which are generally considered to be of low transmission potential but traditionally have had occasional malaria epidemics due to poor immunity and changing weather conditions. LLIN distribution continue in these settings.
- d) Highlands regions between 1600 to 2000m in altitude such as Mount Hagen which have low malaria endemicity and generally easy access to health services. These are low priority areas and when funding is not available are left out. However, up until 2021, these areas have been covered. From 2015 to 2016, these areas received nets for Under Five children only, and since 2017 up until 2021, RAM has managed to find alternative sources to cover these areas. For example, in 2020, nets for these areas were sourced from a donation of the Chinese Government and in other areas from the Global Fund. Fortunately, there was sufficient funds to cover these areas in 2021. Sadly, from 2022 there are no funds to cover these areas nor likely to be for the foreseeable future.
- e) In urban and peri-urban areas such as Port Moresby which are low lying areas with easy access to health, nets will not be distributed during funding constraints. Nets to these areas will be supplied through the private sector. Similarly, due to funding constraints in 2015, Lae City had Under Five Campaign LLINs only.



**Fig.2 – Microplanning Meetings In Banzwan HC (Left) And Tsigmal HC (Right)**

As a result of this stratification and when funds had been reduced such as at the end of 2014, areas above 2000m no longer received nets and areas from 1600 to 2000m only received under five campaigns in 2015 and 2016. However, fortunately, due to the LLIN donation from the Against Malaria Foundation (AMF) in 2017, all areas received household distribution of nets except areas above 2000m, and some urban areas such as NCD, Goroka, Mount Hagen and Mendi. After 2018, AMF only donated nets to areas below 1600m but the country has been lucky to find funding to fill this gap of between (1600-2000m) in 2019, 2020 and for 2021 through donations from the Global Fund (2018-2021) and the Chinese Government (2020).

However, funding for areas between 1600-2000 metres has now stopped as the Global Fund allocations are not presently enough to cover these areas above 1600m.

One of the conditions of the AMF donation is that RAM would strengthen the way in which surveys are carried out. These new innovative processes are described in the Methodology Section. These methodologies are now being carried out since the beginning of 2017. The major change to the survey methodology suggested by AMF is that previously a village meeting was called after a survey was carried out where names of family members were read out to ensure that all households had been surveyed. Instead of this process, a summary of every village surveyed is posted for 24 hours in a public place so that villages can ensure that all their family members have been included in the survey. As a further verification process, members of RAM and local health staff team carry out random house surveys of 6% of households in every village to ensure that the survey process has been carried out correctly.

For household LLIN distributions, regardless of where they are carried out, they must include a survey and a distribution phase though implementation methods may considerably vary depending on specific circumstances. RAM's approach has been to concentrate on programme quality thus RAM develop methodologies that ensure that all recipients in an area actually receive nets and that this can be reported accurately.



**Fig.3 Microplanning At Kudjip HC (Left) And Madan HC (Right)**

The other major change to the original PNG programme of 2004 to 2009 carried out by the NDOH is that nets are allocated to families on a needs basis rather than simply the number of people in the family. Data analysis of National Capital District (NCD) data has shown that this gives a ratio of nets needed to be about 47 for every 100 people. In the previous LLINs distribution of Round-3 in 2006 to 2010, nets were allocated at a rate of one net to every 2.5 people. With the programme only receiving 80% of LLIN needs, and most provinces distributing for example two nets to families of three, in practically every province, nets ran out before the end of the distribution. The RAM programme makes all attempts to assure that this distribution anomaly does not happen by collecting all population information at the beginning of the program and then allocate the nets based on family needs. This strategy is practiced to ensure that all families receive nets throughout any given province. The only scenario where survey and net distribution may be done simultaneously is in very remote locations where it is not practically possible to return a second time to a location. This is particularly the case in remote villages which can only be reached by boat or very long treks and it is costly and impractical to return to the villages for a second time.

In terms of coordination, RAM officers are allocated to specific LLGs or health centres where they coordinate the programme together with local health staff. In this capacity, RAM officers act as facilitators in terms of technical guidance to district health teams in each LLG as well as acting as financial officers and assuring quality control of activities taking place.

## Schedule

### **TABLE TWO**

#### **General Timetable Of Activities In Jiwaka Province**

District	Survey		Distribution	
	Start	Finish	Start	Finish
Anglimp South Waghi	01.07.23	04.08.23	01.07.23	03.09.23
North Waghi	13.07.23	04.09.23	31.07.23	06.09.23

Referring to Table Two, it can be seen that the main distribution in Jiwaka Province started in later July and was completed in early September. It took this time as the province was done in two stages with some health centres being done in July and others in August. However, please note, due to availability of helicopters, Mount Au was only done in December.

## Methodology

Prior to planning and implementation, a master list of all villages of Jiwaka Province was drawn up using data from the 2000 Census and the last RAM survey of 2020 in Jiwaka Province. Villages in the list were organised by LLG and Ward. In this master list, the estimated population for 2023 for each village was estimated and recorded in two ways. Firstly, the population of each village is estimated using population figures from the 2000 Census and the estimated annual growth rate for Jiwaka Province and then secondly, by taking the population surveyed in 2020 and applying the annual growth rate to each village. In addition to this, based on altitude maps, all villages in highlands provinces are categorised and colour coded by altitude zones of below 1200m, 1200 to 1600 metres, 1600 to 2000 metres and lastly those villages above 2000 metres. Only those villages below 1600 metres will receive nets.

In all areas, Health Centres form the hub from which distribution takes place to the respective villages in each health centre's catchment area. Therefore, with the planning data at hand, RAM staff work together with the Provincial Health Office to allocate every village to its nearest health centre (government or Church Based) and outlines how each village is reached from each health centre. From this it is possible to create a budget, estimate how many nets are needed to be sent to each health centre and work out any other logistic considerations such as use of airplanes or boats to deliver nets to some remote areas.

Once all logistical needs are calculated and nets delivered to the province or district, a RAM team will travel to the province. Once they are in the province, RAM officers are allocated to work with each health centre which becomes the centre of operations for that area.

With the arrival of RAM officers, each health facility identifies health staff members or non-health community volunteers to be involved with the programme. If local health staff are selected, then they are referred to as District Health Team (DHT) but if a non-health staff is selected then they are termed as a Team Leader. Both DHTs and Team Leaders are responsible for the survey and distribution of nets. Each DHT and Team Leader works only in the area in which the health facility is based.

Before any activities take place, RAM officers are expected to work with health staff and other team leaders to make detailed plans (micro-planning) of their activities for training, survey, verification and distribution of nets. This process involves making maps of the area, deciding how many teams are needed, and then making detailed work plans for each of the team members. This process also involves verifying that no villages have been left out of the census list and that the whole area is covered.

Also prior to field activities in any given LLG or health centre, a social awareness campaign was carried out in all villages informing villagers of the upcoming survey and distribution. This was also used as an opportunity for RAM officers to become familiar with each area. During this process, key malaria messages were also discussed with villagers such as the need to use LLINs every night.

During the social awareness campaign, a daylong training meeting is normally held at each health facility for all DHT members in that area who jointly carry out the micro-planning exercise. These training and micro-planning sessions as well as all other activities associated with the programme are coordinated by RAM project officers together with health counterparts at provincial and district levels. RAM officers also have the responsibility to ensure the LLINs operation is kept in line with the original budget.

## **Survey**

The survey was carried out in the following way.

- 1) When arriving at a village and before starting the census process, a meeting was held with village elders explaining the process.
- 2) If village elders have an up-to-date list of all village occupants, the team would use this list to compile a census but still visit every household to confirm this information.
- 3) Where a village is small, e.g., less than 30 families, team members may carry out the census by themselves.



**Fig.4 – Training Village Survey Volunteers In Minj (Left) And Madan (Right)**

- 4) Where villages are large, village volunteers were identified with the assistance of the village chiefs, elders, health staff and councillors. One volunteer was chosen for each group of about 50 families with volunteers chosen by natural divisions in the village e.g., clans where one volunteer would make a list of only one clan. These volunteers were trained to carry out the survey by actually surveying houses with the team leaders supervising and assessing the recording. Once the team leader was confident that the volunteers knew the survey methodology, they were left to continue with the household survey with survey teams returning within an agreed period to verify the work of the survey volunteers, collect survey books and also to pay the survey volunteer, provided that the work was carried out correctly. The training of volunteers may occur in groups or individually depending on access to the village and its proximity to other villages.
- 5) For each household surveyed, all family members who normally reside at the household for a minimum of nine months were recorded by Name, Age, Sex and Relationship to head

of household. All names and other information were recorded in the survey book with one survey form being used for each household.

- 6) After surveying a household, a white copy of the census form was given to the head of household or most senior person present in the household.
- 7) Where a whole household was absent, information was taken from the neighbours and the white survey form left with them.
- 8) In all cases, after the census/list was finished, all the information about the households and number of household members is entered into a summary sheet. This list is then hung in a public place where all villages can verify that the right number of family members for each household has been recorded and that all families have been included in the survey. After the list has been in a public place for 24 hours, then the volunteer requests for the RAM officer and or DHT to visit the village.
- 9) RAM officers and DHTs must visit three households randomly from each survey book (6%) and verify that the survey has been carried out correctly. Only when this has been done, then the volunteer can be paid.
- 10) If a village was surveyed by more than one volunteer, then volunteers were asked to work together so that lists can be hung together and the village volunteers can be verified at the same time. This process also ensures that households do not appear on more than one list. After this process, both the volunteers and the village elders sign a form to verify that this was done.
- 11) All village volunteers received a standard payment of 20 kina a day. Experience has shown that volunteers can usually only survey about 25 households a day, so for the most part, they would receive up to two days' allowance to complete a survey book (50 households).
- 12) All volunteers were also given a small training manual. Contained in this training manual are key health education messages about malaria which volunteers are expected to discuss with households. This perhaps is the only project in PNG that is able to reach down to potentially every household in the country.



**Fig.5 – Training Of Village Volunteers In Tombil HC (Left) And Kurki HC (Right)**

To aid with the survey, the master plan with names of all census units in all the wards in the district had been printed out and given to all the DHTs and team leaders. This document also provides the projected population per census unit as well as other information which might be useful to the area concerned.

After collecting survey data from each village, the information is immediately compared with the data on the master sheet. Where the surveyed population is very different from the projected population, the project staff make enquiries into the reasons for these discrepancies.

Following the survey, all data was entered into a computer where possible or entered into a master sheet of the area concerned. For each village, nets were allocated to each family on a

needs basis and this is also entered into the computer or master sheet. This process ensured that all villages received nets and that there would be no shortfalls.

The needs basis in PNG is based on the assumption that children under the age of six sleep with their parents, after which boys and girls are grouped separately from their parents. Nets are also allocated based on the number of children in the house, their ages, and whether there are other dependents living in the households such as grandparents. A full description of the allocation system can be obtained from RAM officers but suffice to say a family of four could receive between one to four nets depending on the sex and age of family members.

Nets are allocated to each LLG based on assumed populations of each LLG and it was important prior to the distribution to ensure that when allocations had been carried out to families and villages that there were enough nets available to cover each and every family.

### ***Distribution***

There was no official launch for the LLINs distribution in Jiwaka Province. However, prior to distribution there was a social awareness phase where the project teams informed communities about the arrival of the distribution teams, especially those accessible by road.

The LLINs were then distributed to teams depending on the needs of each village. The LLINs were then distributed by village or wards depending on whether villages were close together. In this latter case, a central location was identified in the ward and then distribution of nets was carried out. In terms of distribution sites, villages were organised in different ways to make the flow of nets easy and effective. However, the actual organisation depended on each team and the structure of the various groups receiving nets.

All net packaging was opened at distribution site with a district code printed on each net e.g., JW23 meaning Jiwaka Province 2023. This code is added to identify nets to assist in future monitoring exercises as well as discouraging householders from selling the nets on the open market.

Some examples of the process used to control the crowd includes;

- Arranging the people according to the serial numbers in the survey books e.g., 72001 - 72050 and then calling the names and the serial numbers.
- Call the names of the owners of the households, collect the white copy and give the nets.
- Wait for everyone to come to the distribution site, collect all the white copies and sort the copies with the pink copies. Call the names on the white copies and give the nets.

Some of the following control methods were used.

- Everyone who presented with a white copy was given LLINs at the distribution site with LLINs only given to the owner of the house or a member of the house whose name is written on the back of the survey form.
- Those people who lost the white receipts were left to the end of each distribution, with nets only being issued if the name of the person collecting the nets was found on the back of the pink copies.
- For those families who were absent at the time of distribution, their names were written in a form – MOSQUITO NETS HELD IN TRUST BY VILLAGE CHIEFS FORM and the nets allocated to missing families were given to chiefs or any person entrusted by the community with the forms for these families to collect their LLINs later.
- Householders are now being asked to make a thumb print as proof of delivery of nets to a household. The Global Fund had formally asked that householders should sign for delivery of nets. This was considered problematic as many householders are illiterate and even

where householders can write, this process takes a long time in what is often a very chaotic and charged environment where speed is of the essence.

It should also be noted that surveys and distributions took place at more or less the same time in some remote places of Jiwaka Province. This is particularly true for mountainous villages or villages at the end of rivers which might take several hours or days to reach. In these instances, estimations based on the 2000 Census data and local knowledge used to pre-allocate nets. Teams were then dispatched to these areas with nets. On arrival in these remote places, surveys took place and were immediately followed by a distribution based on the survey results.

### **Other details**

In the case of Jiwaka Province, all the LLINs were ultimately delivered to Lae by ship from India in five containers. These nets are known as Duranet and are light blue in colour and made from polyethylene. All nets arriving in Lae were custom cleared by Express Freight Management and then stored primarily in their premises in Lae. After this, containers were moved to Mount Hagen by road then stored at the hauliers yard. From the containers the nets were moved to the Jiwaka Provincial Health Office (PHO) and from there to the various health facilities in the province by road. Due to a breakdown of a side lifter truck, the nets were delayed in arriving in the PHO which resulted in many nets being taken directly to health facilities from Mount Hagen by vehicles and overall, delaying the program as a whole.

## **Results**

Table Three shows the LLIN distribution data by district and Table Four by Local Level Government (LLG). These tables give the actual population surveyed together with the number of LLINs distributed by district. In total, 115,654 LLINs were distributed to a population of 231,358 people in the two. This resulted in distribution of 49.5 nets for every 100 people in the areas where the nets were distributed.

**TABLE THREE**  
**Nets Distributed At District Level In Jiwaka Province**

District	Population from 2000 Census	Population Of Targeted Areas In 2020	Total Estimated Population 2023	Population Surveyed 2023	House Holds Surveyed 2023	Nets Issued 2023	Nets Distributed Per 100 People	Growth Rate Against 2020 Survey
Anglimp South Waghi	96,570	117,130	127,991	131,691	26,776	65,110	49.4	3.98
North Waghi	69,498	86,003	93,978	102,172	19,613	50,544	49.5	5.91
<b>Totals</b>	<b>166,068</b>	<b>203,133</b>	<b>221,969</b>	<b>233,863</b>	<b>46,389</b>	<b>115,654</b>	<b>49.5</b>	<b>4.81</b>

**TABLE FOUR**  
**Nets Distributed At LLG Level In Jiwaka Province**

LLG	District	Population from 2000 Census	Population Of Targeted Areas In 2020	Total Estimated Population 2023	Population Surveyed 2023	House Holds Surveyed 2023	Nets Issued 2023	Nets Distributed Per 100 People	Growth Rate Against 2020 Survey
Anglimp Rural	Anglimp South Waghi	42,734	28,060	30,662	32,425	6,317	16,083	49.6	4.94
South Waghi Rural	Anglimp South Waghi	53,836	89,070	97,329	99,266	20,459	49,027	49.4	3.68
North Waghi Rural	North Waghi	69,498	86,003	93,978	102,172	19,613	50,544	49.5	5.91
<b>Totals</b>		<b>166,068</b>	<b>203,133</b>	<b>221,969</b>	<b>233,863</b>	<b>46,389</b>	<b>115,654</b>	<b>49.5</b>	<b>4.81</b>

Referring to Table Three and Table Four, it can be seen that the overall population growth rate in the areas concerned was 4.81% which is a very high population growth and suggests that Jiwaka has one of the highest growth rates in the country, particularly North Waghi Rural. Alternatively, this means that many people have emigrated into the area.

Referring to Table Five, a further 22 LLINs were donated to health centres for use for antenatal nets or for use over beds in the health facility. Donations only occurred where there were a few loose nets left or it was difficult to return the nets to the central store in Mount Hagen.

**TABLE FIVE**  
**Nets Donated To Health Centres**

District	LLG	HC	Donated
Anglimp South Waghi	Anglimp Rural	Kurki HC	15
Anglimp South Waghi	Anglimp Rural	Madan HC	7
<b>TOTAL</b>			<b>22</b>

Referring to Table Six, it can be seen that the overall operational cost of the programme was 412,279 Kina (Approximately US\$114,522) resulting in a cost of about 3.56 Kina or US\$0.99 per net delivered. While this was about 9% over the anticipated budget, the cost of delivery is very reasonable for the highlands and that fact that a helicopter had to be hired to reach Mount Au where the airfield is no longer serviceable. The main extra costs were in car hire and helicopter hire.

**TABLE SIX**  
**Cost Of Programme In Jiwaka Province (All Costs in Kina)**

Expense Types	Budget	Actual	Variance	% Variance
Human Resources	K108,365.03	K112,400.00	-K4,034.97	103.7
Fuel	39,678.00	K34,295.31	K5,382.69	86.4
Vehicle Hire	204,500.00	K211,150.00	-K6,650.00	-22.1
Aircraft Hire	6,000.00	K48,000.00	-K42,000.00	800.0
Stationary	3,000.00	K4,378.39	-K1,378.39	-46.0
5% Contingency	16,502.15	K2,056.09	K14,446.06	12.5
<b>Totals</b>	<b>K378,045.18</b>	<b>K412,279.79</b>	<b>-K34,234.61</b>	<b>-9.1</b>

Referring to Table Six, this shows the cell phone and radio coverage for Jiwaka Province is very good in North Waghi and Anglim South Waghi. The only real exception in Mount Au which lacks both cell and radio nets works. This means that getting health messages out to Mount Au is very problematic.

**TABLE SIX**  
**Cell and Radio Coverage In Jiwaka Province**

District	Villages	House Holds Surveyed	Digicel	Bmobile	Houses with Phones	Houses with Radios	Villages With Radio Networks
Anglimp	265	26,776	252	189	17,571	1,316	244
North Waghi	216	19,613	207	205	5,705	2,758	206
<b>Total</b>	<b>481</b>	<b>46,389</b>	<b>459</b>	<b>394</b>	<b>23,276</b>	<b>4,074</b>	<b>450</b>

## Conclusions

Overall, it can be said that the LLIN distribution in Jiwaka Province was generally a huge success both in terms of results and great collaboration between staff from RAM, provincial and district health authorities, and the Catholic, Apostolic, Lutheran, Nazarene, Seventh Day Adventist (SDA) and Evangelical Brotherhood Church Health Services who have a presence in the areas receiving nets. Through this collaboration, the data suggests that all villages were reached and practically all families in those villages received nets despite any local challenges. However, some challenges occurred which include:

- Some survey volunteers duplicated the house count to give bigger than expected populations. Fortunately, these errors were identified during the verification and distribution stages, prompting cancellation of delivery of LLIN to duplicated villages. However, since the population was higher than expected, it is possible that not all duplications were identified.
- Tribal conflicts in certain catchment areas led to delays and the rescheduling of distribution dates.
- The Nelma Transport Limited company, tasked with transporting containers of nets from Mt Hagen to Jiwaka, faced a setback when its side lifter broke down, causing a delay in deliveries for nearly two weeks. During this period, other local trucking companies and the preferred hired vehicles facilitated deliveries for nearby areas. Nelma successfully resumed deliveries after the side lifter was repaired.
- At the Banz accommodation, there was an incident where thieves cut open the fence at a secluded section, covered the security floodlight with a towel, and proceeded to steal various parts from the project vehicle with registration LBT 568. The stolen items include both back door glass panels, both rear mirrors (left and right), and the bracket for the air cleaner (snorkel).
- On August 6, 2023, during distribution of mosquito nets for Dona Station, and the remaining distribution for Dona village was also conducted on the same day. While distributing nets in Dona village, individuals approached the volunteers, requesting additional nets with various excuses. Frustrated by the situation, one volunteer tore the white receipts in half. The RAM officer intervened and successfully managed to calm the situation and resolve the issue.

Overall, however, despite these challenges, there was excellent collaboration between all health staff and RAM staff so that together the program managed to complete all their operations successfully.



**Fig.6 – Household Survey Verification In Banz (Left) And Summary Form Hung In Minj HC (Right)**

Other than this, as with other provinces in the country where RAM has operated in over the last ten years, the methodologies used this time, including survey verification processes appeared practical and were openly welcomed by both villagers and implementers, particularly the practice of hanging up the list of names in the middle of the village following a survey. This allowed communities to feel that they were part of a transparent process. This is not to say that perhaps some extra people managed to slip into the books, but in general, it was felt that the system was fair and included practically everyone concerned. The use of the master lists also ensured that all villages were reached and accounted for.

The review of the data prior to the distribution was also important. This ensured that all villages and families received the correct numbers of nets. The 2000 Census lists were very important to ensure that survey teams reached all villages: without the complete list of villages, it would be very difficult to make a detailed report.

The greatest complaint still received from communities was the number of nets they received. Even though the team explained the logic of how the allocation of nets is calculated, some families still expect one net per person, others expect it to be based on a fixed allocation based on the number of people in the family, and yet others thought they would be given nets based on the number of nets they stated they already had. This highlights that a better system of explaining the allocation system still needs to be developed. In general, unlike some previous districts covered by RAM and DHTs of Jiwaka Province assisted in the allocation of the nets which meant they were in a better position to explain the distribution system on the ground. Nevertheless, despite all the difficulties involved, it would appear that the vast majority of community members accepted the outcome and there were no real problems or complaints encountered.

## **Acknowledgements**

On behalf of the Rotarians Against Malaria household distribution team who worked in Anglimp South Waghi and North Waghi districts, we would like to sincerely acknowledge and thank the Jiwaka Health Authority and the District Health Staff of the two districts for the excellent help and cooperation during the Long Lasting Insecticide Nets (LLINs) distribution programme.

In particular, we would like to thank at provincial level Mr Thaddeus Turi (Chief Executive Officer) and his team with special thanks to Sr Kolly Bang (Director Public Health), Mr Titus Tul (Deputy Director Facility Manager), Mr John Gene (Provincial Disease Control Officer) and Mr John Bak (Provincial Malaria Supervisor).

For the district staff, we would like to sincerely thank all those who tirelessly took part in the programme, and in particular we would like to mention the following people who were instrumental in providing the local expertise and advice from planning to implementation of the programme in the two districts namely:

### **Anglimp South District**

<b>Name</b>	<b>Occupation</b>	<b>Institution</b>
Mr. Jack Wambi	Officer in Charge	Kideng Health Centre
Sr. Carol	Sister in Charge	Minj Health Centre
Mr. Samuel Ale	Community Health Worker	Minj Health Centre
Sr. Dominica Ivanga	Officer in Charge	Kurki Health Centre
Mr. Raymond Ketua	Nursing Officer	Anglimp Community Health Post
Mr. Korki Mian	Officer in Charge	Tsigmil Health Centre
Mr. Joshua Mathew	Nursing Officer	Tsigmil Health Centre
Mr. Thomas Paul	Community Health Worker	Tsigmil Health Centre

Mrs. Carol Kepako	Sister in Charge	Madan Health Centre
Mr. Lawrence Sap Nasial	Community Health Worker	Madan Health Centre
Mr. John Bule	Community Health Worker	Kudjip Health Centre
Mrs. Tevi Fago	Community Health Worker	Kudjip Health Centre
Mr. Erick James	Nursing Officer	Aviamp Health Centre
Mr. Max Peter	Officer in Charge	Tombil Health Centre
Mr. Jackson Frank	Health Extension Officer	Tombil Health Centre

#### **North Waghi District**

<b>Name</b>	<b>Occupation</b>	<b>Institution</b>
Ms. Judith Nani	Community Health Worker	Banz2 Health Centre
Mr. Michael Kambie	Community Health Worker	Banzwan Health Centre
Mr. Jessy Kumb	Community Health Worker	Kimil Health Centre
Mrs. Susan	Nursing Officer	Kimil Health Centre
Mr. Quala Mess	Officer in Charge	Nondugl Health Centre
Mr. John Koimo	Community Health Worker	Nondugl Health Centre
Mr. John Opri	Community Health Worker	Nondugl Health Centre
Mr. Jack	Officer in Charge	Dona Health Centre
Mr. Isaac Komni	Community Health Worker	Dona Health Centre

RAM would like to specially acknowledge the support received from established and local service providers for logistical support namely; Nelma transport for delivering 10 containers from Lae to Jiwaka Province and stored at Jiwaka PHA yard.

RAM also thanks all the local hire car owners, for allowing their cars for these operations. We would not have reached many communities without the dedication of the drivers. RAM would like to also thank Softronix Fuel Limited and Siku Fuel & Lubricants for supplying bulk fuel for the operation.

RAM also thanks all the church run health facilities coordinated under Catholic Church, Apostolic Church, Lutheran Church, Nazarene Church, Seventh Day Adventist (SDA), Evangelical Brotherhood Church and lastly to all the Government run facilities for allowing their staff to work with the RAM team.

Last but not the least, RAM would like to extend our acknowledgement and appreciation to all the hard-working volunteers and local community leaders for ensuring all homes were surveyed and assisted in distributing all the nets. RAM thanks you all very much for your hard work, support and local expertise in making the overall program a success.

## Appendix One – History Of LLIN Distribution In PNG

The use of Insecticide Treated Nets (ITNs) started in PNG in 1985 when the PNG Institute of Medical Research (IMR) conducted one of the first trials demonstrating the health impact of treating mosquito nets with insecticide. The study, done near Madang, showed a reduction of *P. falciparum* incidence and prevalence in children below five years of age sleeping under permethrin-treated nets. The protective effect of insecticide-treated nets (ITNs) was also confirmed in many other trials around the world. As a consequence of such findings, the national malaria control program in PNG started emphasizing the use of ITNs in 1989. However, no regular or large-scale distribution of ITNs was carried out at this time.

In the following years, coverage with mosquito nets and other control interventions remained patchy and low in many parts of PNG. It was during this period that Rotarians Against Malaria (RAM) was created from the Port Moresby Rotary Club in 1997. Using a donation of 150,000 treated nets given to them from the National Department of Health (originally from AusAid), RAM successfully ran a revolving fund of nets in which nets were sold at a price which allowed the proceeds to buy more nets. RAM did this successfully for many years distributing about 45,000 treated nets a year from 2000 to 2004.

Prior to 2004, most treated nets had to be re-treated every six months or a year which requires a lot of work and organisation. In early 2004 everything changed with the introduction of Long-Lasting Insecticidal Nets (LLINs) which would last for 20 washes and effectively no longer required to be treated repeatedly. This change in nets also coincided with the introduction of the Global Fund into PNG known as the Global Fund Round 3.

From 2005 to 2009 the malaria programme in PNG received and delivered about 2.3 million nets throughout the country at a rate of one net for every 2.5 people. The delivery of nets to village level was under the provincial health authorities and reached most parts of the country with Rotarians Against Malaria (RAM) being responsible in delivering the containers of nets to the provinces from Port Moresby and Lae where the nets arrived from overseas.

While the programme was very successful in some areas it was not so successful in others. Problems included slow release of funds from central to provincial level, some provinces not following technical guidelines given resulting in some areas not been covered, and technical and financial reporting leaving a lot to be desired in many of the provinces. When further funds became available in what is known as the Global Fund Round Eight, it was decided that Rotarians Against Malaria (RAM) would take over the coordination of the LLIN programme under the supervision of the National Malaria Control Program.

This change has resulted in RAM being responsible for the overall coordination of the LLIN distribution of LLINs in the country particularly in the areas of quantification, procurement, reporting and delivery to provincial and district level. However, the actual delivery of nets to village level is a collaboration between RAM, provincial health authorities and district health and health centre staff.

Fig.1 shows the distribution of nets to districts and provinces from 2006 to 2009 while Fig.2 shows the distribution of nets from 2010 to 2014 and Fig.3 shows the distribution from 2015 to 2017 which includes under five distributions in 2016 and 2017. Under Five distributions had been carried out in areas above 1600m and in Port Moresby and Lae City due to lack of funds. This situation changed when support from Against Malaria Foundation was received.

Up until June 2022, a total of 14.7 million LLINs had been distributed to household level under the coordination of RAM. Therefore, with the 2.5 million nets distributed from 2006 to 2009, this means that about 17.2 million nets have been delivered to household level in PNG since 2006. This is more than one net per every person in PNG. RAM has also distributed about

another 1.5 million nets to health centres for distribution to pregnant women and for prisons and boarding schools.

It should also be noted that alongside developments related to treated mosquito nets, the first cases of chloroquine-resistant malaria were reported in 1976. This progressed rapidly to widespread resistance of *P. falciparum*, and to a slightly lesser extent *P. vivax*, to chloroquine, amodiaquine and sulphadoxine-pyrimethamine (SP). In studies conducted between 2003 and 2005, even combination regimens of these drugs faced up to 29% resistance of *P. falciparum*<sup>2</sup>. This situation together with Global Fund Round 8 also saw the introduction of artemether lumefantrine branded as Malawan and IPT (Intermittent Preventative Treatment) for antenatal women using Fansidar (Pyrimethamine Dapsone).

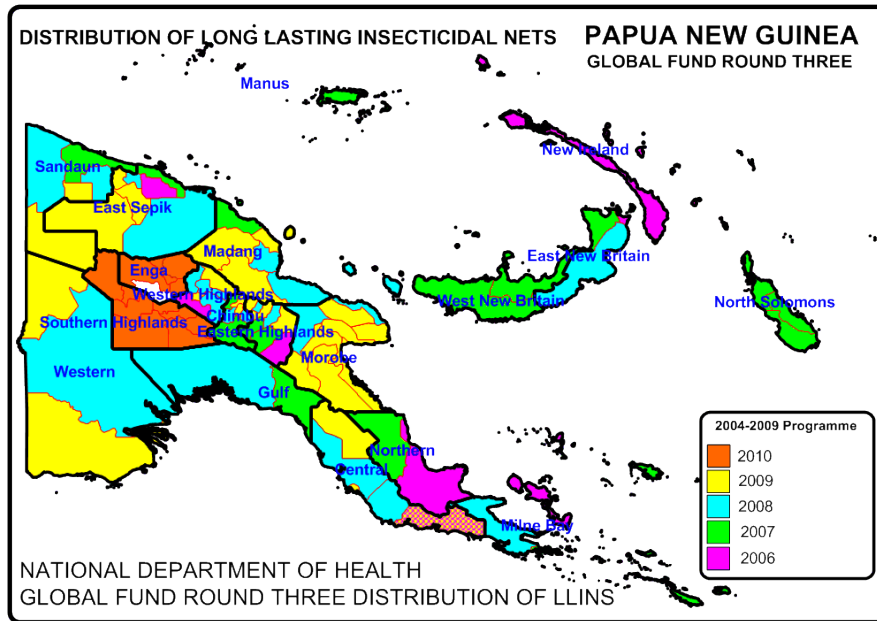


Fig. 1 Distribution Of Nets Under National Department Of Health From 2006 To 2010

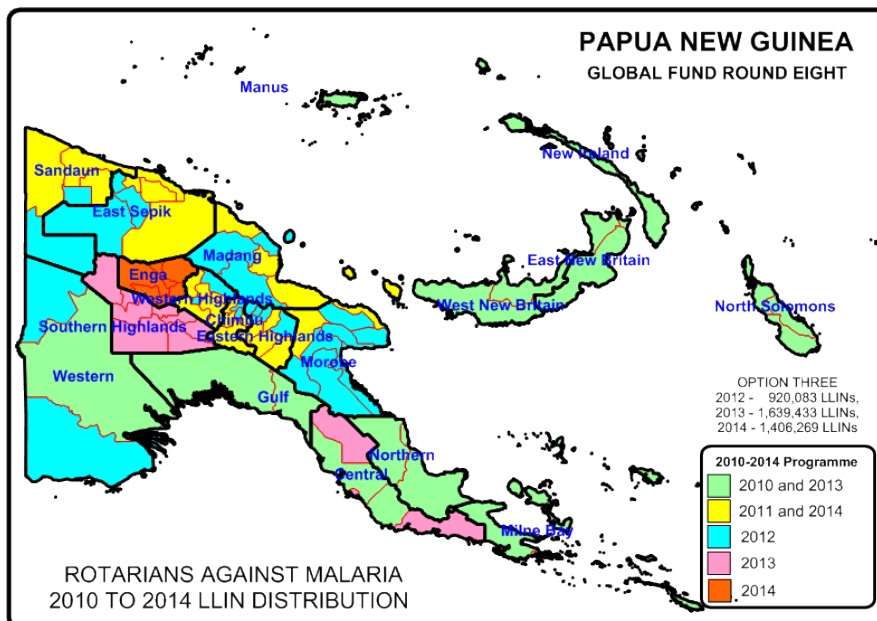


Fig.2 Distribution of LLIN Programme 2010 to 2014

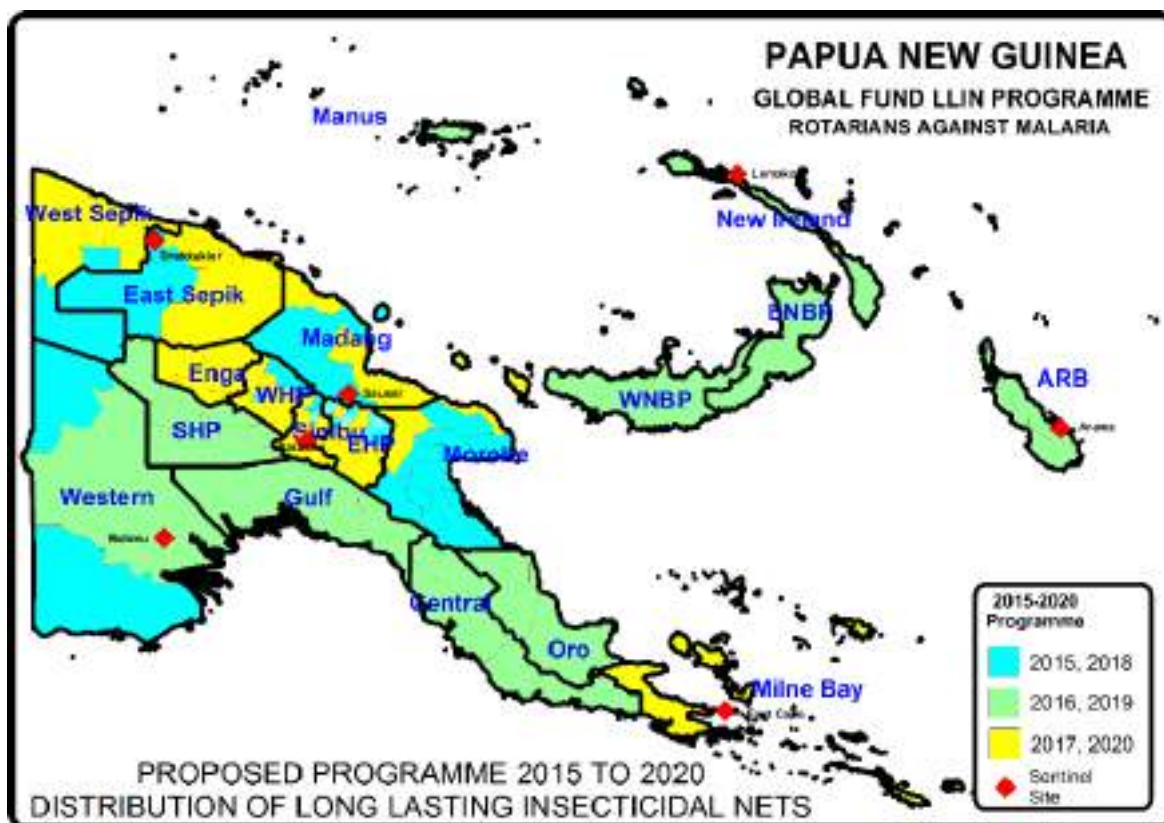


Fig.3 LLIN Distribution Programme 2015 to 2020

**TABLE ONE - LLINs Delivered In PNG Under Coordination Of RAM From 2010**

Period	Dates	Districts	Provinces	Nets Delivered	Type Of Net Delivered
Phase One (2010-2011)	Nov 09 - Oct 11	50 Districts	18 Provinces	1,890,448	Permanet 2
Year 3 (2012)	Nov 11 - Sep 12	27 Districts	10 Provinces	832,671	Permanet 2
Year 4 (2013)	Oct 12 - Sep 13	28 Districts	12 Provinces	1,210,391	Permanet 2
Year 5 (2014)	Oct 13 - Sep 14	23 Districts	11 Provinces	1,374,791	Permanet 2
Year 5 (2014) No Cost Extension	Oct 14 - Dec 14	Okapa, Lufa, Madang, Angoram, Maprik, Yangoru Saussi, Wewak, Aitape Lumi, Nuku and Vanimo Green	EHP, Madang, East Sepik and Sandaun	454,806	Permanet 2
Year 6 (2015)	Jan - Dec 2015	29 Districts	11 Provinces	932,822	Permanet 2
Year 7 (2016)	Jan - Dec 2016	27 Districts	13 Provinces	805,597	Permanet 2
Year 8 (2017)	Jan - Dec 2017	36 Districts	13 Provinces	1,543,947	Permanet 2
Year 9 (2018)	Jan - Dec 2018	27 Districts	11 Provinces	1,211,922	Permanet 2
Year 10 (2019)	Jan - Dec 2019	26 Districts	12 Provinces	1,266,525	Permanet 2
Year 11 (2020)	Jan - Dec 2020	28 Districts	13 Provinces	1,495,368	Safenet, Interceptor, Yorkool and Royal Sentry
Year 12 (2021)	Jan - Dec 2021	30 Districts	9 Provinces	1,301,456	Yahe
Year 13 (2022)	Jan - Dec 2022	28 Districts	11 Provinces	973,829	Magnets, Yorkool, Yahe
Year 14 (2023)	Jan- Mar 2023	Talasea, Kandrian Gloucester, Rabaul, Kokopo, Pomio, Gazelle, Wabag	West New Britain, East New Britain and Enga	266,336	Magnet, Duranet
	Apr - Jun 2023	Alotau, Samurui Murua, Es'sala, Kiriwina Goodenough, Mul Baiyer and Tambul Nebilyer	Milne Bay, Western Highlands	334,278	Magnet, Duranet
New Funding Model (2015-2021)				10,132,080	
Round Eight (2010 - 2014)				5,763,107	
Overall Total Phase One and Phase Two And NFM				15,895,187	

## Appendix Two – Malaria In Jiwaka Province Compared With Other Provinces

Fig.1 shows the decrease of malaria from 2007 to 2015 in all provinces, Fig. 2 shows the actual suspected malaria incidence in 2020 compared with other provinces and Fig.3 shows annual malaria trends from 2017 to 2021 and Fig. 4 the malaria incidence against LLIN distribution. In Jiwaka Province, it can be seen from Fig.1 that malaria decreased from 2007 to 2015 by 86% which was one of the highest decreases of malaria in the PNG together with Eastern Highlands and Southern Highlands. In Fig. 2, in 2020 it can also be seen that in Jiwaka Province the suspected malaria incidence is 36 per 1000 which is highest malaria incidence recorded in the Highlands though this is mainly due to Jimi District which is low lying. Fig. 3 and Fig.4 show the suspected malaria incidence by year compared with net distributions in Jiwaka Province. It can be noted that in general, LLIN distributions prior to 2015 resulted in a significant decrease of malaria, but after this, malaria incidence has remained steady and we expect with the new distribution of LLINs this will remain the case. It is now believed that Jiwaka except for the very low lying areas in Jimi District are essentially malaria free and all reported cases are imported from elsewhere. The reason we can say this is because the majority of malaria cases, are predominantly adult cases and the majority of under five cases come Jimi District in the low lying areas of the province. However, it is considered necessary to continue distribution of LLINs in these epidemic prone areas to avoid malaria returning to Jiwaka Province in the upper areas of the province.

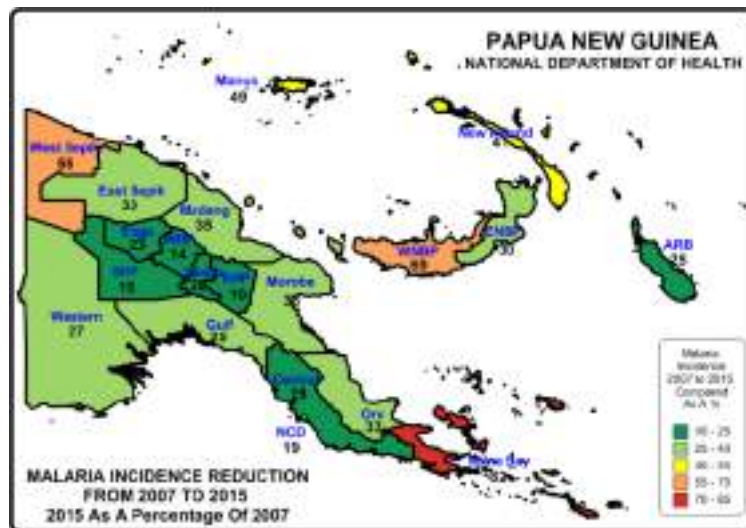


Fig.1 – Relative Reduction Of Malaria In Provinces Of PNG

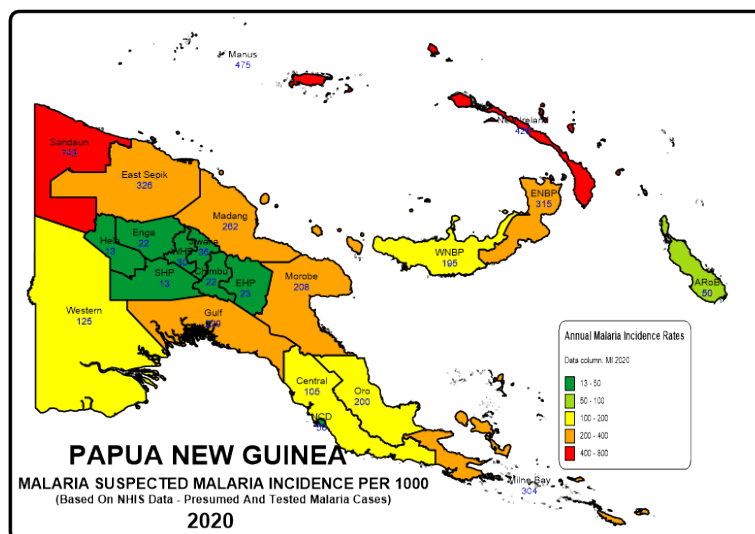


Fig.2 – Reported Malaria Incidence In 2020

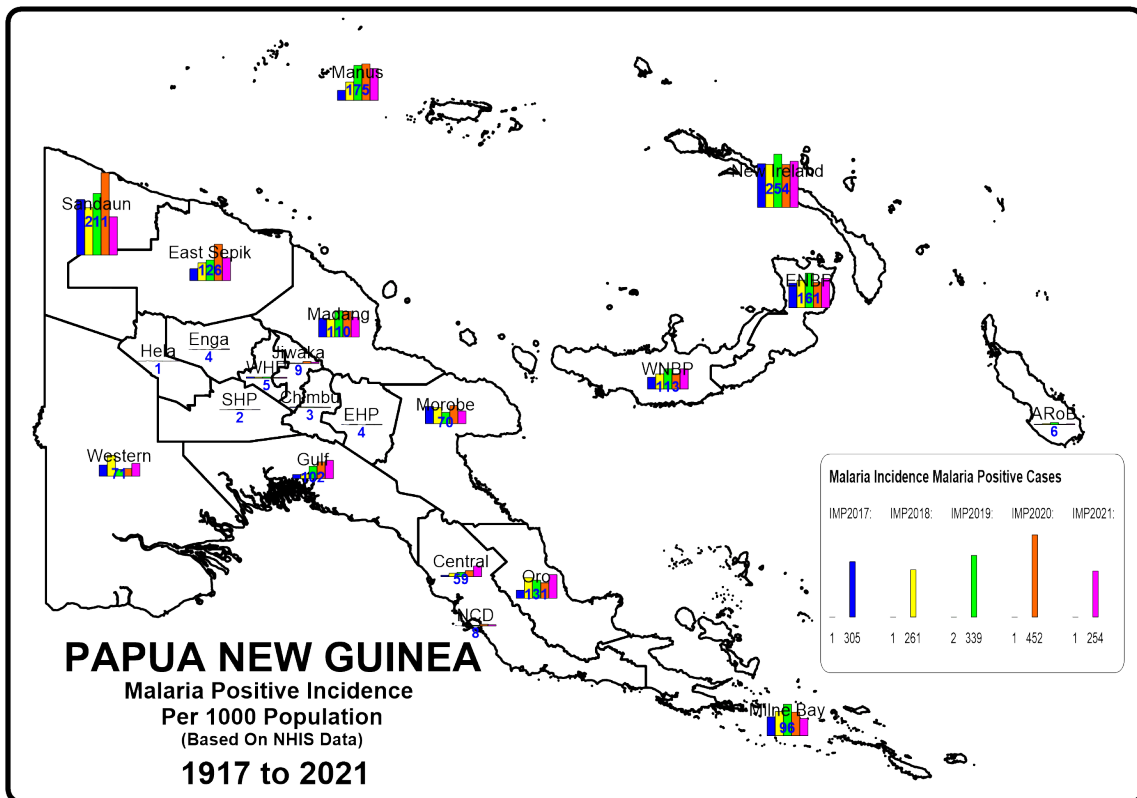


Fig. 3 - Reported Malaria Incidence In PNG From 2016 To 2020

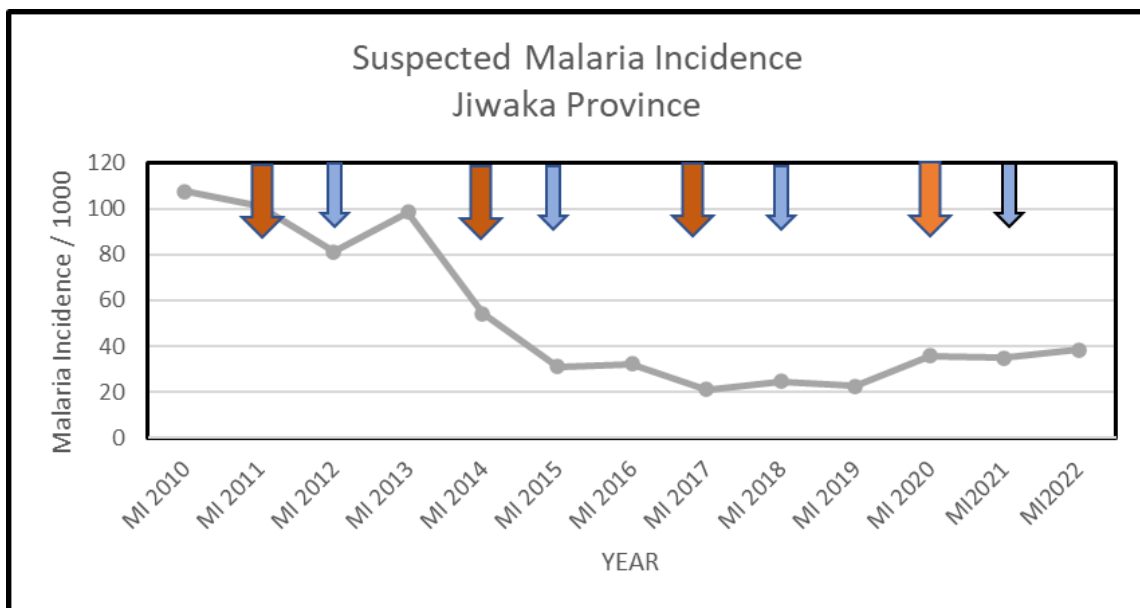
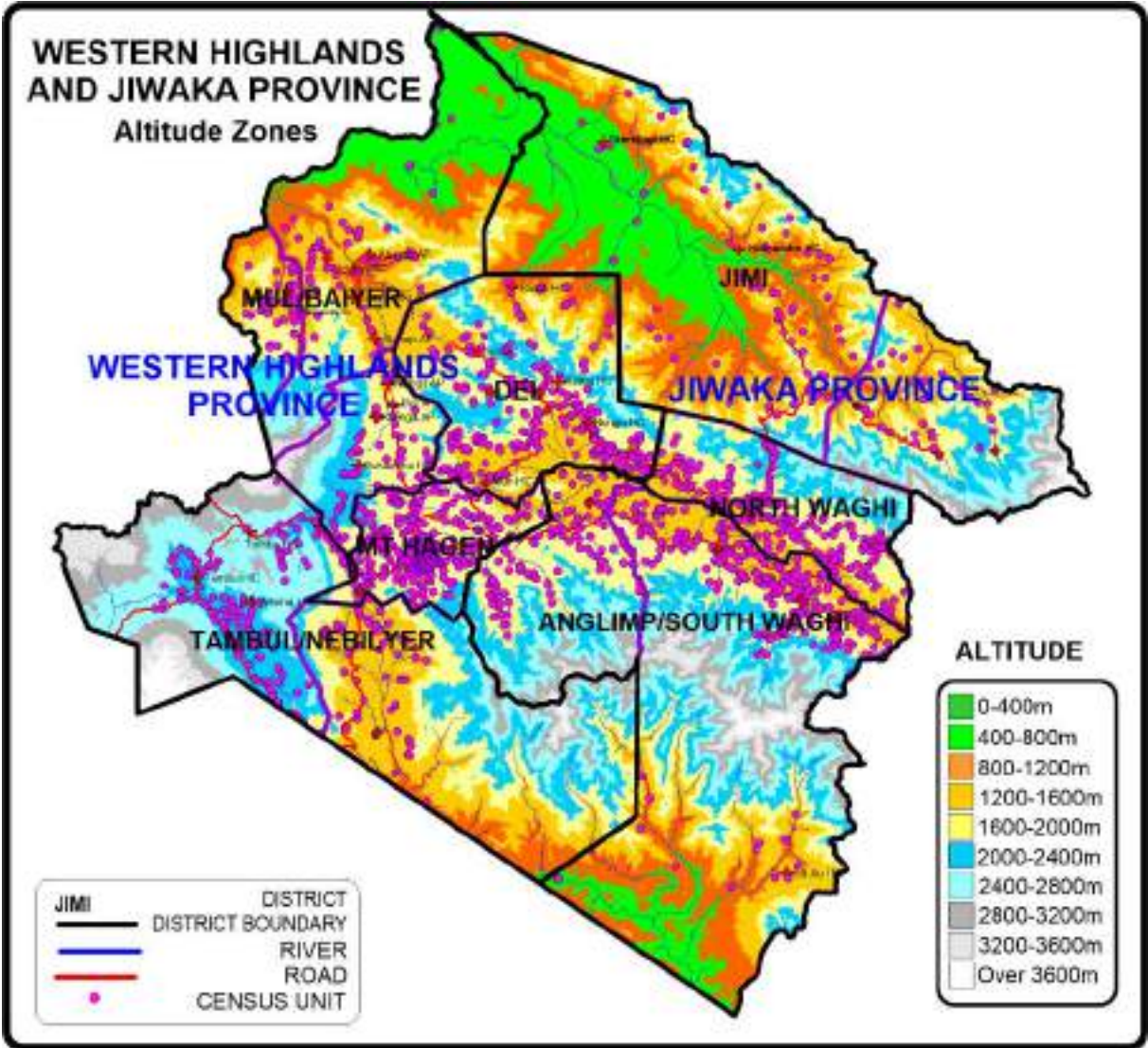


Fig. 4 – Malaria Suspected Malaria Incidence Versus Distribution Of Nets  
Brown arrows represents LLIN distributions done in Jiwaka Province in f 2011, 2014, 2017 and 2020 in Anglimp South Waghi and Anglimp South Waghi and North Waghi and light blue arrows represent LLIN distributions in Jimi District in 2012, 2015, 2018, and 2021.

### Appendix Three - Malaria By Altitude

Jiwaka Province is a Highlands Province on the mainland of Papua New Guinea (PNG). It is made up of three districts of Anglimp South Waghi, Jimi and North Waghi. While it is a highlands province with mountains over 3,500 metres, it also has low lying areas going down to below 400 metres in Jimi District and below 800 metres in the South of Anglimp South Waghi. The low lying regions below 1200 metres are endemic for malaria while those areas above 2000m are malaria free. Areas between 1200-1600 metres are considered epidemic in nature but presentably malaria free. In reality, only about 2.5% of the population live in endemic malaria zones with about 39% lining in epidemic areas and 50% living in areas between 1600-2000 metres where malaria transmission (if it occurs) is limited to *Plasmodium vivax* . The rest of the population live in areas above 2000 metres where malaria does not occur. Practically the whole population of Anglimp South Waghi and North Waghi where net distribution occurred in 2023 are accessible by road with about 1% in the Mount Au area only accessible by plane and trekking.

Fig. 1 Altitude Zones In Western Highlands And Jiwaka Province



**Appendix Four – Other Photographs**



Survey Verification In Banzwan (Left) And Kurki (Right)



Distributions Banzwan (Left) And Kurki (Right)



Distributions In Tombil (Right) and Gona (Right)



Loading Trucks And Nets In Containers In Jiwaka and PHA

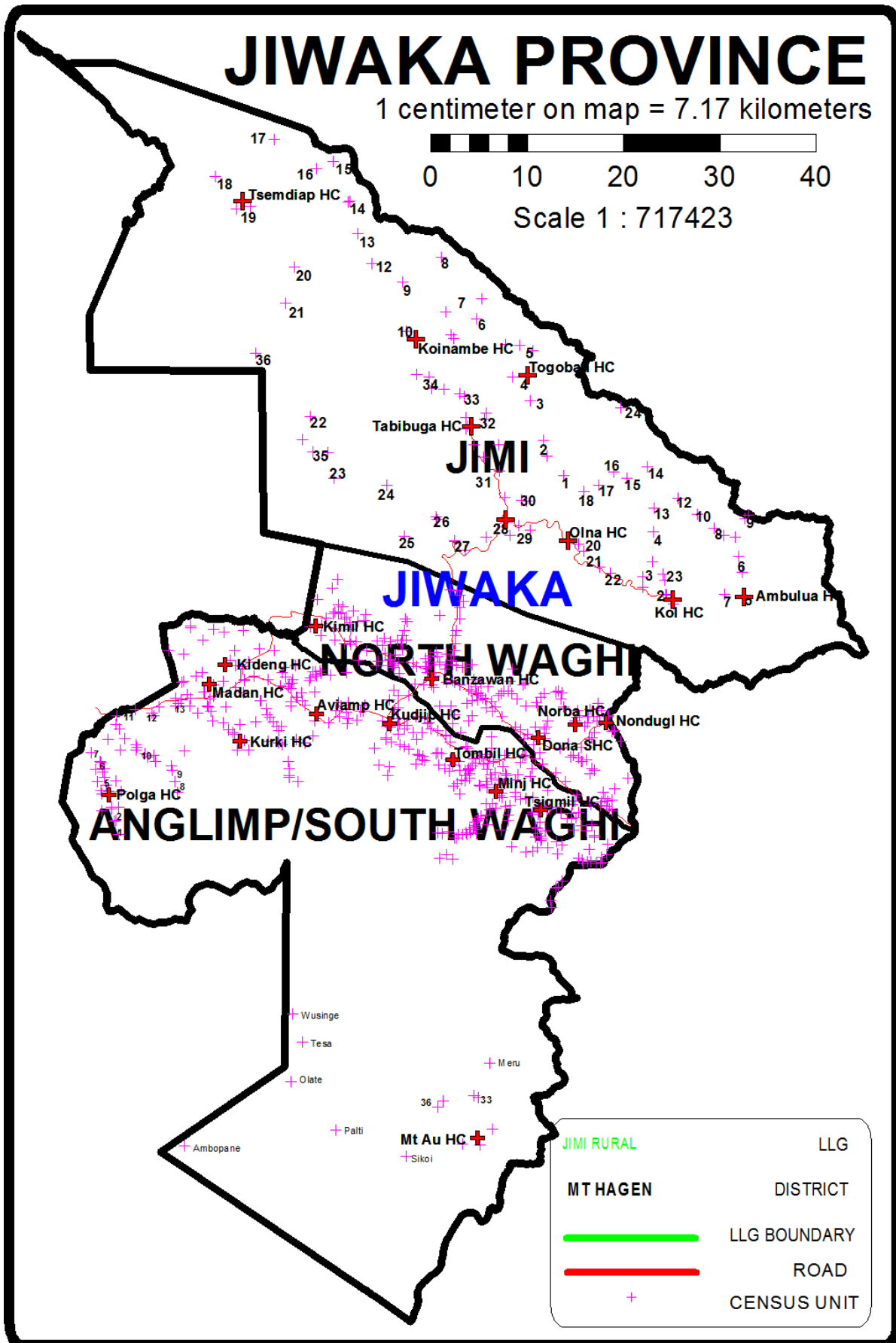


Happy Customers In Tombil and Nondugl



Happy Customer In Dona (Left) and Donating Extra Nets At Madan For ANC (Right)

Appendix Five - Map Of Jiwaka Province Showing Census Points Of 2000 Census



# ANNEX ONE

## JIWAKA PROVINCE ANGLIMP SOUTH WAGHI DISTRICT POPULATION 2023 LLIN DISTRIBUTION PLANNING SHEET

	Altitude
	Above 2000 m
	1600-2000 m
	1200-1600 m
	Less than 1200m

LLG	WARD	VILLAGE	Estimated 2023 Data Based On 2000 Census	Estimated 2023 Data Based On 2020 Data	Health Centre	Population Surveyed	House Holds Surveyed	Nets Issued	Date Of Distribution	Villages	Digicel	Bmobile	Houses With Phones	Houses With Radios	Radio Networks	Comments
<b>ANGLIMP SOUTH WAGHI DISTRICT</b>			<b>208,634</b>	<b>208,634</b>		<b>131,691</b>	<b>26,776</b>	<b>65,110</b>		<b>265</b>	<b>252</b>	<b>189</b>	<b>17,571</b>	<b>1,316</b>	<b>244</b>	
<b>ANGLIMP RURAL</b>			<b>92,404</b>	<b>30,662</b>		<b>32,425</b>	<b>6,317</b>	<b>16,083</b>		<b>47</b>	<b>47</b>	<b>28</b>	<b>5,236</b>	<b>891</b>	<b>48</b>	
1	Kaip 1		<b>3,029</b>													
		Kaip 1a	724		Polga HC											Road
		Koip	915		Polga HC											Road
		Rukpa	579		Polga HC											Road
		Kaip 1b	811		Polga HC											Road
2	Kaip 2		<b>3,349</b>													
		Kaip 2	307		Polga HC											Road
		Ruldui	452		Polga HC											Road
		Polapena Kona	378		Polga HC											Road
		Tokuapena Kona	443		Polga HC											Road
		Pembunga	497		Polga HC											Road
		Oper	454		Polga HC											Road
		Kilinga	495		Polga HC											Road
		Kaip Community School	322		Polga HC											Road
		Ramdani	0		Polga HC											Road
3	Polga 1		<b>1,527</b>													
		Polga 1	424		Polga HC											Road
		Polgagena	647		Polga HC											Road
		Enga	456		Polga HC											Road
4	Polga 2		<b>1,922</b>													
		Polga 2	636		Polga HC											Road
		Kalap	378		Polga HC											Road
		Menim	355		Polga HC											Road
		Lel	554		Polga HC											Road
5	Wurup 1		<b>1,092</b>													
		Wurup 1	311		Polga HC											Road
		Eka	781		Polga HC											Road
6	Wurup 2		<b>4,335</b>													
		Wurup 2	115		Polga HC											Road
		Wurup Sing	391		Polga HC											Road
		Pakum	904		Polga HC											Road
		Kandep Market	461		Polga HC											Road
		Warawau Plnt	2,022		Polga HC											Road
		Wurup Plnt	443		Polga HC											Road
		Kandep Block	0		Polga HC											Road
7	Wurup 3		<b>2,971</b>													
		Wurup 3	156		Polga HC											Road
		Pulgbulg	992		Polga HC											Road
		Wurup Pena Kona	404		Polga HC											Road
		Kokpena Kona	1,418		Polga HC											Road
8	Kiliga 1		<b>2,766</b>													
		Kiliga 1	716		Polga HC											Road
		Kurkur	880		Polga HC											Road
		Tapuk	389		Polga HC											Road
		Kontaina	781		Polga HC											Road
9	Kiliga 2		<b>1,866</b>													
		Kiliga 2	536		Polga HC											Road
		Koim	547		Polga HC											Road
		Wurup	378		Polga HC											Road
		Emuk	404		Polga HC											Road
		Kurkur P/ Sch-New Village			Polga HC											Road
10	Ulya		<b>3,021</b>													
		Ulya	662		Polga HC											Road
		Apra	804		Polga HC											Road
		Komon Crusher	508		Polga HC											Road
		Ulya Plantation	525		Polga HC											Road
		Ulya Settlement	521		Polga HC											Road
		Oga	0		Polga HC											Road
		Pimi Ropla			Polga HC											Road
11	Panga		<b>2,376</b>													
		Panga	796		Polga HC											Road
		Panga Coffee Factory	545		Polga HC											Road
		Cri & Dpi Camp	1,036		Polga HC											Road
12	Kutibulg 1		<b>5,170</b>													
		Kutibulg	1,695		Polga HC											Road
		Nguakona	1,016		Polga HC											Road
		Kutumbulg C/S	971		Polga HC											Road
		Komon Plantation	1,488		Polga HC											Road
		Kuki Kupan	0		Polga HC											Road
13	Kutibulg 2		<b>1,732</b>													
		Kutibulg 2	1,053		Polga HC											Road
		Bunamulg	541		Polga HC											Road
		Kupmandu	138		Polga HC											Road
14	Ketepunga 1		<b>5,750</b>													
		Ketepunga 1	679		Kurki HC											Road

LLG	WARD	VILLAGE	Estimated 2023 Data Based On 2000 Census	Estimated 2023 Data Based On 2020 Data	Health Centre	Population Surveyed	House Holds Surveyed	Nets Issued	Date Of Distribution	Villages	Digicel	Bmobile	Houses With Phones	Houses With Radios	Radio Networks	Comments
		Kurki	491		Kurki HC											Road
		Apra	528		Kurki HC											Road
		Kora 1	714		Kurki HC											Road
		Ketepunga 2	430		Kurki HC											Road
		Kumbulumb	618		Kurki HC											Road
		Kandapai	318		Kurki HC											Road
		Kora 2	454		Kurki HC											Road
		Rapei	737		Kurki HC											Road
		Rebiamulg	653		Kurki HC											Road
		Kuli Catholic Mission	128		Kurki HC											Road
		Merepung	0		Kurki HC											Road
		Mamna	0		Kurki HC											Road
		Kapmolgi	0		Kurki HC											Road
15	Rogomp 1		<b>1,972</b>													
		Rogomp 1	478		Ketepam HC											Road
		Kartanim	385		Ketepam HC											Road
		Negan	361		Ketepam HC											Road
		Green Market	458		Ketepam HC											Road
		Kalgup	290		Ketepam HC											Road
16	Rogomp 2		<b>2,301</b>													
		Rogomp 2	443		Ketepam HC											Road
		Muk	582		Ketepam HC											Road
		Ramuk	350		Ketepam HC											Road
		Tuning	484		Ketepam HC											Road
		Kumie	441		Ketepam HC											Road
		Wilimi	0		Ketepam HC											Road
		Walagmi	0		Ketepam HC											Road
		Station	0		Ketepam HC											Road
17	Ketepam 1		<b>3,940</b>													
		Ketepam 1	752		Ketepam HC											Road
		Rokraka	941		Ketepam HC											Road
		Kumei	381		Ketepam HC											Road
		Pugkuk	1,146		Ketepam HC											Road
		Kiltmuli	720		Ketepam HC											Road
18	Ketepam 2		<b>3,427</b>													
		Ketepam 2	774		Ketepam HC											Road
		Andu	547		Ketepam HC											Road
		Ruti	839		Ketepam HC											Road
		Pulgmi	830		Ketepam HC											Road
		Kerpi	437		Ketepam HC											Road
19	Papen		<b>4,807</b>													
		Papen	1,250		Ketepam HC											Road
		Road Junction Aog	1,308		Ketepam HC											Road
		Bom Kaukau Market	1,053		Ketepam HC											Road
		Malenga Kora	657		Ketepam HC											Road
		Meng	489		Ketepam HC											Road
		Papen Community School	50		Ketepam HC											Road
		Kunisent	0		Ketepam HC											Road
		Negan Flower	0		Ketepam HC											Road
		Goimben Dal	0		Ketepam HC											Road
20	Kideng 1		<b>4,526</b>	<b>3,325</b>		<b>4,097</b>	<b>855</b>	<b>2,046</b>		<b>6</b>	<b>6</b>	<b>0</b>	<b>792</b>	<b>226</b>		
		Kideng Block Road 1	1,096	577	Kideng HC	941	197	469	14.08.23	1	1	0	186	4	Eagle FM	Road
		Kideng Block Road 2	1,248	0	Kideng HC	839	202	416	14.08.23	1	1	0	166	55	Eagle FM	Road
		Kideng Factory	912	680	Kideng HC	469	59	233	14.08.23	1	1	0	100	61	Eagle FM	Road
		Kideng Tea	951	1,189	Kideng HC	1,015	220	514	12.08.23	1	1	0	170	27	Eagle FM	Road
		Kideng Dpi	318	404	Kideng HC	421	100	211	15.08.23	1	1	0	95	9	Eagle FM	Road
		Kideng Block Road 1B	0	475	Kideng HC	412	77	203	14.08.23	1	1	0	75	70	Eagle FM	Road
21	Kideng 2		<b>6,578</b>	<b>7,177</b>		<b>6,534</b>	<b>1,316</b>	<b>3,245</b>		<b>8</b>	<b>8</b>	<b>0</b>	<b>1,040</b>	<b>166</b>		
		Kideng 2	1,276	761	Kideng HC	585	126	301	15.08.23	1	1	0	113	29	Eagle FM	Road
		Kideng Block Road 3	1,656	1,233	Kideng HC	1,254	227	613	15.08.23	1	1	0	182	76	Eagle FM	Road
		Kideng Block Road 4	2,059	1,532	Kideng HC	1,460	298	718	16.08.23	1	1	0	239	17	Eagle FM	Road
		Kideng Community School	95	173	Kideng HC	174	31	86	12.08.23	1	1	0	29	1	Eagle FM	Road
		Kideng Coffee Plnt	1,384	1,405	Kideng HC	1,375	310	683	13.08.23	1	1	0	209	27	Eagle FM	Road
		Kideng Health Centre	108	201	Kideng HC	170	42	89	12.08.23	1	1	0	39	3	Eagle FM	Road
		Kora @ Kideng 2Ward	0	369	Kideng HC	326	84	165	12.08.23	1	1	0	57	6	Eagle FM	Road
		Kideng 2 (6)	0	1,504	Kideng HC	1,190	198	590	17.08.23	1	1	0	172	7	Eagle FM	Road
22	Mugumamp		<b>2,763</b>	<b>3,195</b>		<b>2,816</b>	<b>629</b>	<b>1,411</b>		<b>5</b>	<b>5</b>	<b>0</b>	<b>487</b>	<b>50</b>		
		Mugumamp F0rest	567	579	Kideng HC	858	195	430	11.08.23	1	1	0	149	0	Eagle FM	Road
		Mumi Project	495	450	Kideng HC	93	27	48	11.08.23	1	1	0	17	0	Eagle FM	Road
		Mapi Project	956	896	Kideng HC	809	185	412	11.08.23	1	1	0	169	45	Eagle FM	Road
		Rotep Project	551	829	Kideng HC	1,018	215	502	12.08.23	1	1	0	145	5	Eagle FM	Road
		Rom	195	440	Kideng HC	38	7	19	13.08.23	1	1	0	7	0	Eagle FM	Road/Trek
23	Madan		<b>4,063</b>	<b>3,539</b>		<b>4,231</b>	<b>816</b>	<b>2,067</b>		<b>7</b>	<b>7</b>	<b>7</b>	<b>568</b>	<b>240</b>		
		Madan Block Road 1	303	238	Madan HC	210	39	102	12.08.23	1	1	1	38	37	93.1FM	Road
		Madan Block Road 2	625	308	Madan HC	283	62	141	12.08.23	1	1	1	51	19	93.1FM	Road
		Madan Block Road 3	906	749	Madan HC	1,092	150	512	12.08.23	1	1	1	92	81	93.1FM	Road
		Madan Market	865	1,710	Madan HC	1,710	390	851	13.08.23	1	1	1	226	64	93.1FM	Road
		Kalap Market	240	0	Madan HC	495	97	245	14.08.23	1	1	1	96	9	93.1FM	Road
		Madang Reserve 1	750	325	Madan HC	307	48	147	14.08.23	1	1	1	35	0	93.1FM	Road
		Madan Reserve 2	374	210	Madan HC	134	30	69	14.08.23	1	1	1	30	30	93.1FM	Road
24	Avi 1		<b>2,396</b>	<b>4,544</b>		<b>5,820</b>	<b>970</b>	<b>2,832</b>		<b>3</b>	<b>3</b>	<b>3</b>	<b>813</b>	<b>150</b>		
		Avi 1	1,258	0	Madan HC	1,059	194	501	08.08.23	1	1	1	185	99	93.1FM	Road
		Oben Road	469	2,164	Madan HC	1,426	264	673	08.08.23	1	1	1	217	36	93.1FM	Road
		Avi Community School	668	2,380	Madan HC	3,335	512	1,658	11.08.23	1	1	1	411	15	93.1FM	Road

LLG	WARD	VILLAGE	Estimated 2023 Data Based On 2000 Census	Estimated 2023 Data Based On 2020 Data	Health Centre	Population Surveyed	House Holds Surveyed	Nets Issued	Date Of Distribution	Villages	Digicel	Bmobile	Houses With Phones	Houses With Radios	Radio Networks	Comments
25	Avi 2		<b>5,417</b>	<b>3,570</b>		<b>3,247</b>	<b>562</b>	<b>1,544</b>		<b>5</b>	<b>5</b>	<b>5</b>	<b>488</b>	<b>53</b>		
		Avi 2	653	556	Madan HC	718	165	358	10.08.23	1	1	1	126	35	93.1FM	Road
		Pen Road	1,241	810	Madan HC	517	119	261	14.08.23	1	1	1	117	9	93.1FM	Road
		Avi Market	757	940	Madan HC										93.1FM	Same village as Avi 2
		Kumunga	854	398	Madan HC	601	107	286	10.08.23	1	1	1	77	3	93.1FM	Road
		Waghi Rev Blk	1,728	698	Madan HC	1,330	150	595	11.08.23	1	1	1	150	3	93.1FM	Road
		Wesleyan B/College	184	168	Madan HC	81	21	44	10.08.23	1	1	1	18	3	93.1FM	Road
26	Dopdop 1		<b>5,237</b>	<b>2,552</b>		<b>2,948</b>	<b>620</b>	<b>1,502</b>		<b>6</b>	<b>6</b>	<b>6</b>	<b>542</b>	<b>3</b>		
		Dopdop 1	229	676	Kurki HC	715	150	380	11.08.23	1	1	1	121	0	Eagle FM	Road
		Lgatep	1,157	0	Kurki HC											Non Existant
		Klunga	869	0	Kurki HC											Non Existant
		Kamdaka 1	480	556	Kurki HC	509	99	244	13.08.23	1	1	1	95	0	Eagle FM	Road
		Anda Upper	672	402	Kurki HC	407	92	203	11.08.23	1	1	1	87	0	Eagle FM	Road
		Lower Anda	618	451	Kurki HC	395	100	208	11.08.23	1	1	1	98	0	Eagle FM	Road
		Kamdaka 2	188	0	Kurki HC											Non Existant
		Kulki 1	448	250	Kurki HC	365	83	189	10.08.23	1	1	1	45	3	Eagle FM	Road
		Kulki 2	575	215	Kurki HC	557	96	278	10.08.23	1	1	1	96	0	Eagle FM	Road
27	Dopdop 2		<b>4,072</b>	<b>2,760</b>		<b>2,732</b>	<b>549</b>	<b>1,436</b>		<b>7</b>	<b>7</b>	<b>7</b>	<b>506</b>	<b>3</b>		
		Dopdop 2	445	0	Kurki HC											Non Existant
		Mega	489	565	Kurki HC	356	73	178	12.08.23	1	1	1	55	0	Eagle FM	Road
		Eltai	763	519	Kurki HC	429	90	269	10.08.23	1	1	1	88	1	Eagle FM	Road
		Ulgmulg	884	483	Kurki HC	370	92	192	13.08.23	1	1	1	84	0	Eagle FM	Road
		Kapmul	530	0	Kurki HC											Non Existant
		Kenjip	662	322	Kurki HC	314	44	158	12.08.23	1	1	1	37	2	Eagle FM	Road
		Anglimp Station	298	320	Kurki HC	442	100	225	11.08.23	1	1	1	100	0	Eagle FM	Road
		Aura/Kurikeri	0	0	Kurki HC	233	50	121	13.08.23	1	1	1	46	0	Eagle FM	Road
		Vetican	0	551	Kurki HC	588	100	293	12.08.23	1	1	1	96	0	Eagle FM	Road
			0													
<b>SOUTH WAGHI RURAL</b>			<b>116,230</b>	<b>97,329</b>		<b>99,266</b>	<b>20,459</b>	<b>49,027</b>		<b>218</b>	<b>205</b>	<b>161</b>	<b>12,335</b>	<b>425</b>	<b>196</b>	
1	Aviamp 3		<b>10,809</b>	<b>9,065</b>		<b>10,252</b>	<b>2,655</b>	<b>4,925</b>		<b>14</b>	<b>14</b>	<b>14</b>	<b>0</b>	<b>14</b>		
		Menjim	1,302	879	Aviamp HC	808	150	378	04.08.23	1	1	1	0	1	FM/AM	Road
		Rumur	1,589	1,253	Aviamp HC	1,578	362	830	01.08.23	1	1	1	0	1	FM/AM	Road
		Kemning	627	0	Aviamp HC	488	100	234	14.08.23	1	1	1	0	1	FM/AM	Road
		Bunum	2,236	1,336	Aviamp HC	1,165	843	524	31.08.23	1	1	1	0	1	FM/AM	Road
		Beming	1,857	1,187	Aviamp HC	1,059	204	457	05.08.23	1	1	1	0	1	FM/AM	Road
		Tun	776	993	Aviamp HC	617	123	284	01.08.23	1	1	1	0	1	FM/AM	Road
		Tuman Naz.b/Coll	737	282	Aviamp HC	464	85	234	10.08.23	1	1	1	0	1	FM/AM	Road
		Simbu Block	614	0	Aviamp HC	901	150	444	08.08.23	1	1	1	0	1	FM/AM	Road
		Kinzka Block	510	648	Aviamp HC	958	181	453	08.08.23	1	1	1	0	1	FM/AM	Road
		Nondugl Block	560	118	Aviamp HC	286	50	134	08.08.23	1	1	1	0	1	FM/AM	Road
		Waghi flood		424	Aviamp HC	422	100	204	10.08.23	1	1	1	0	1	FM/AM	Road
		Menjim Crasher		525	Aviamp HC	257	57	145	11.08.23	1	1	1	0	1	FM/AM	Road
		Minning		426	Aviamp HC	808	150	383	01.08.23	1	1	1	0	1	FM/AM	Road
		Waghi kona		994	Aviamp HC	441	100	221	01.08.23	1	1	1	0	1	FM/AM	Road
2	Aviamp Plnt		<b>5,129</b>	<b>3,304</b>		<b>4,747</b>	<b>940</b>	<b>2,162</b>		<b>15</b>	<b>14</b>	<b>14</b>	<b>4,740</b>	<b>14</b>		
		Factory	275	243	Aviamp HC	209	50	99	08.08.23	1	1	1	0	1	FM/AM	Road
		Nursery	225	178	Aviamp HC	170	37	81	10.08.23	1	1	1	0	1	FM/AM	Road
		Aviamp Tea & coffee	456	281	Aviamp HC	219	50	94	09.08.23	1	1	1	0	1	FM/AM	Road
		Sepik Compound	121	137	Aviamp HC	121	38	61	10.08.23	1	1	1	0	1	FM/AM	Road
		Mendi Compound	370	0	Aviamp HC	153	37	67	08.08.23	1	1	1	0	1	FM/AM	Road
		Kandep Compound	158	300	Aviamp HC	511	100	223	08.08.23	1	1	1	0	1	FM/AM	Road
		Tambul Compound	115	164	Aviamp HC	195	50	93	11.08.23	1	1	1	0	1	FM/AM	Road
		Gumine Block	303	50	Aviamp HC	109	38	53	10.08.23	1	1	1	0	1	FM/AM	Road
		Keram Community School	327	94	Aviamp HC					1						Included Under Keram Block
		Pugmi Rest Block	15	173	Aviamp HC	234	50	107	05.08.23	1	1	1	0	1	FM/AM	Road
		Kigaba West 1	452	198	Aviamp HC	305	62	137	09.08.23	1	1	1	0	1	FM/AM	Road
		Pugmi Dpi	919	440	Aviamp HC	682	126	305	05.08.23	1	1	1	0	1	FM/AM	Road
		Kigaba St'tmt	413	266	Aviamp HC	405	70	173	09.08.23	1	1	1	0	1	FM/AM	Road
		Kigaba East Plt	275	169	Aviamp HC	519	82	226	09.08.23	1	1	1	0	1	FM/AM	Road
		Keram Block	707	612	Aviamp HC	915	150	443	09.08.23	1	1	1	0	1	FM/AM	Road
3	Aviamp 2		<b>4,612</b>	<b>4,488</b>		<b>4,204</b>	<b>806</b>	<b>1,931</b>		<b>8</b>	<b>8</b>	<b>8</b>	<b>0</b>	<b>8</b>		
		Aviamp 2	967	239	Aviamp HC	319	50	136	03.08.23	1	1	1	0	1	FM/AM	Road
		Popun	711	1,298	Aviamp HC	898	204	431	04.08.23	1	1	1	0	1	FM/AM	Road
		Panjin	941	827	Aviamp HC	773	150	339	02.08.23	1	1	1	0	1	FM/AM	Road
		Kaim	426	863	Aviamp HC	728	150	343	03.08.23	1	1	1	0	1	FM/AM	Road
		Kope 1	694	288	Aviamp HC	605	100	264	03.08.23	1	1	1	0	1	FM/AM	Road
		Kope 2	664	507	Aviamp HC	566	100	257	03.08.23	1	1	1	0	1	FM/AM	Road
		Nazarene Cir.	210	263	Aviamp HC	120	19	73	03.08.23	1	1	1	0	1	FM/AM	Road
		Aviamp HC and Colledge	0	201	Aviamp HC	195	33	88	02.08.23	1	1	1	0	1	FM/AM	Road
4	Aviamp 1		<b>2,350</b>	<b>2,120</b>		<b>1,944</b>	<b>397</b>	<b>874</b>		<b>5</b>	<b>5</b>	<b>5</b>	<b>0</b>	<b>5</b>		
		Aviamp 1	450	786	Aviamp HC	692	125	295	04.08.23	1	1	1	0	1	FM/AM	Road
		Kumdiku	595	233	Aviamp HC	188	45	89	04.08.23	1	1	1	0	1	FM/AM	Road
		Kugmi	417	205	Aviamp HC	221	50	91	05.08.23	1	1	1	0	1	FM/AM	Road
		Rutban	512	483	Aviamp HC	305	77	148	03.08.23	1	1	1	0	1	FM/AM	Road
		Aviamp Community School	376	413	Aviamp HC	538	100	251	04.08.23	1	1	1	0	1	FM/AM	Road
5	Kauwi		<b>4,227</b>	<b>5,390</b>		<b>5,309</b>	<b>1,080</b>	<b>2,609</b>		<b>9</b>	<b>9</b>	<b>2</b>	<b>1,403</b>	<b>0</b>		
		Kauwi	887	796	Kudjip HC	813	144	393	28.08.23	1	1	1	120	0	NBC	Road
		Kami	454	532	Kudjip HC	451	100	219	28.08.23	1	1	0	98	0	NBC	Road
		Pogromb	454	479	Kudjip HC	460	100	227	28.08.23	1	1	0	200	0	NBC	Road
		Kikald	275	318	Kudjip HC	257	50	128	29.08.23	1	1	0	115	0	NBC	Road
		Kupa	450	499	Kudjip HC	567	130	278	29.08.23	1	1	0	250	0	NBC	Road
		Polki	649	447	Kudjip HC	476	91	225	28.08.23	1	1	0	220	0	NBC	Road
		Pulmar	603	405	Kudjip HC	909	166	449	28.08.23	1	1	1	150	0	NBC	Road

LLG	WARD	VILLAGE	Estimated 2023 Data Based On 2000 Census	Estimated 2023 Data Based On 2020 Data	Health Centre	Population Surveyed	House Holds Surveyed	Nets Issued	Date Of Distribution	Villages	Digicel	Bmobile	Houses With Phones	Houses With Radios	Radio Networks	Comments
		Kagbug	268	977	Kudjip HC	661	152	329	29.08.23	1	1	0	150	0	NBC	Road
		Simbu Block	188	938	Kudjip HC	715	147	361	29.08.23	1	1	0	100	0	NBC	Road
6	Kubagang		<b>5,246</b>	<b>5,943</b>		<b>6,152</b>	<b>1,067</b>	<b>2,941</b>		<b>9</b>	<b>9</b>	<b>8</b>	<b>1,435</b>	<b>0</b>		
		Kubagang	826	1,487	Kudjip HC	1,618	282	751	30.08.23	1	1	1	250	0	NBC	Road
		Baning 1	832	1,185	Kudjip HC	1,441	221	710	30.08.23	1	1	1	22	0	NBC	Road
		Baning 2	610	445	Kudjip HC	530	97	252	29.08.23	1	1	1	250	0	NBC	Road
		Oi	285	491	Kudjip HC	416	83	203	31.08.23	1	1	1	198	0	NBC	Road
		Apen	835	571	Kudjip HC	585	100	274	30.08.23	1	1	0	87	0	NBC	Road
		Kiglad	203	0	Kudjip HC											Non Existant
		Mt. Tapi	381	214	Kudjip HC	540	98	254	30.08.23	1	1	1	250	0	NBC	Road
		Alois C/Factory	409	547	Kudjip HC					1	1	1				Included Under Banning 1
		Simbu Block	465	563	Kudjip HC	547	98	274	31.08.23	1	1	1	180	0	NBC	Road
		Wagi /Kane Block	400	440	Kudjip HC	475	88	223	31.08.23	1	1	1	198	0	NBC	Road
7	Kungar 2		<b>2,413</b>	<b>3,163</b>		<b>3,505</b>	<b>825</b>	<b>1,766</b>		<b>5</b>	<b>5</b>	<b>0</b>	<b>822</b>	<b>0</b>		
		Kungar 2	337	234	Kudjip HC	439	99	220	23.08.23	1	1	0	208	0	NBC	Road
		Pasmai	662	966	Kudjip HC	1,004	200	508	16.08.23	1	1	0	160	0	NBC	Road
		Kusin	333	605	Kudjip HC	381	76	190	16.08.23	1	1	0	43	0	NBC	Road
		Kugan	634	672	Kudjip HC	911	250	472	23.08.23	1	1	0	211	0	NBC	Road
		Kane	448	686	Kudjip HC	770	200	376	16.08.23	1	1	0	200	0	NBC	Road
8	Kungar 1		<b>3,803</b>	<b>5,013</b>		<b>6,465</b>	<b>1,149</b>	<b>3,167</b>		<b>8</b>	<b>8</b>	<b>1</b>	<b>910</b>	<b>0</b>		
		Kungar 1	618	551	Kudjip HC	718	135	346	22.08.23	1	1	0	120	0	NBC	Road
		Piltange	344	617	Kudjip HC	960	200	481	16.08.23	1	1	0	167	0	NBC	Road
		Kunjil Kantri	796	962	Kudjip HC	703	114	348	22.08.23	1	1	0	99	0	NBC	Road
		Pepik	450	998	Kudjip HC	1,746	250	820	24.08.23	1	1	1	232	0	NBC	Road
		Wagamil	404	296	Kudjip HC	207	50	105	26.08.23	1	1	0	0	0	NBC	Road
		Marangil	407	441	Kudjip HC	597	100	289	23.08.23	1	1	0	88	0	NBC	Road
		Kopsip	551	617	Kudjip HC	654	150	341	16.08.23	1	1	0	90	0	NBC	Road
		Pisaming	234	531	Kudjip HC	880	150	437	24.08.23	1	1	0	114	0	NBC	Road
9	Kudjip Plnt		<b>5,032</b>	<b>4,852</b>		<b>6,927</b>	<b>1,337</b>	<b>3,516</b>		<b>17</b>	<b>17</b>	<b>14</b>	<b>738</b>	<b>0</b>		
		Kudjip Tea Compound 1	748	416	Kudjip HC	492	100	241	02.09.23	1	1	1	98	0	NBC	Road
		Kudjip Tea Compound 2	115	222	Kudjip HC	259	50	129	02.09.23	1	1	1	21	0	NBC	Road
		Kudjip Tea Compound 4	247	244	Kudjip HC	223	50	117	02.09.23	1	1	1	33	0	NBC	Road
		Kudjip Coffee Comp'd 1	564	492	Kudjip HC	477	100	232	02.09.23	1	1	1	0	0	NBC	Road
		Kudjip Coffee Comp'd 2	143	410	Kudjip HC	419	100	195	02.09.23	1	1	1	56	0	NBC	Road
		Kudjip Coffee Comp'd 3	296	184	Kudjip HC	310	46	142	02.09.23	1	1	1	15	0	NBC	Road
		Kudjip Coffee Comp'd 4	156	231	Kudjip HC	207	50	107	02.09.23	1	1	1	22	0	NBC	Road
		Jimbina Plnt (1)	290	0	Kudjip HC											Non Existant
		Wabag Compound	110	0	Kudjip HC	244	50	117	01.09.23	1	1	1	42	0	NBC	Road
		Damine Compound 1	186	0	Kudjip HC	350	49	160	01.09.23	1	1	1	22	0	NBC	Road
		Damine Compound 2	270	0	Kudjip HC	315	50	145	01.09.23	1	1	1	33	0	NBC	Road
		Waghi Plnt (1)	487	0	Kudjip HC	308	50	154	01.09.23	1	1	1	17	0	NBC	Road
		Waghi Plnt (2)	346	0	Kudjip HC	402	50	185	01.09.23	1	1	1	36	0	NBC	Road
		Mangara (1)	175	590	Kudjip HC	230	42	105	01.09.23	1	1	1	15	0	NBC	Road
		Mangara (2)	182	334	Kudjip HC	337	50	157	01.09.23	1	1	0	33	0	NBC	Road
		Wagamil 1	316	562	Kudjip HC	810	200	445	26.08.23	1	1	0	154	0	NBC	Road
		Wagamil 2	229	552	Kudjip HC	836	150	523	26.08.23	1	1	1	25	0	NBC	Road
		Wagamil 3	173	616	Kudjip HC	708	150	362	26.08.23	1	1	0	116	0	NBC	Road
10	Kudjip Hospital		<b>1,064</b>	<b>2,296</b>		<b>2,309</b>	<b>400</b>	<b>1,090</b>		<b>4</b>	<b>4</b>	<b>3</b>	<b>331</b>	<b>0</b>		
		Kudjip Hospital	820	390	Kudjip HC	659	107	308	22.08.23	1	1	1	83	0	NBC	Road
		Kudjip Nursing College	145	314	Kudjip HC	120	21	57	22.08.23	1	1	0	8	0	NBC	Road
		Kudjip Community School	99	309	Kudjip HC	357	58	165	22.08.23	1	1	1	35	0	NBC	Road
		Kudjip Police station & Block	0	1,283	Kudjip HC	1,173	214	560	03.09.23	1	1	1	205	0	NBC	Road
11	Puri		<b>2,854</b>													
		Puri	867		Kudjip HC											Road
		Pagem	400		Kudjip HC											Road
		Munge	538		Kudjip HC											Road
		Tupa	316		Kudjip HC											Road
		Argnan	441		Kudjip HC											Road
		Pukmar	281		Kudjip HC											Road
		Piltage Community School	11		Kudjip HC											Road
		Mori			Kudjip HC											Road
		Mise			Kudjip HC											Road
		Kupals			Kudjip HC											Road
12	Kurumul 1		<b>3,321</b>	<b>6,480</b>		<b>5,088</b>	<b>1,263</b>	<b>2,702</b>		<b>12</b>	<b>12</b>	<b>12</b>	<b>951</b>	<b>0</b>		
		Kurumul 1	164	267	Tombil HC	161	32	82	23.08.23	1	1	1	24	0	NBC	Road
		Kugmil	365	521	Tombil HC	379	137	213	27.08.23	1	1	1	133	0	NBC	Road
		Milang	192	544	Tombil HC	233	84	123	27.08.23	1	1	1	30	0	NBC	Road
		Kasbal	346	464	Tombil HC	348	100	194	27.08.23	1	1	1	48	0	NBC	Road
		Kawil	236	1,074	Tombil HC	903	172	478	23.08.23	1	1	1	169	0	NBC	Road
		Kore	162	303	Tombil HC	296	100	171	27.08.23	1	1	1	56	0	NBC	Road
		Kilip	588	732	Tombil HC	751	150	378	23.08.23	1	1	1	147	0	NBC	Road
		Banamil	221	530	Tombil HC	507	132	259	27.08.23	1	1	1	73	0	NBC	Road
		Tamban	346	768	Tombil HC	547	126	293	23.08.23	1	1	1	86	0	NBC	Road
		Kurumul Tea/Coffee	437	617	Tombil HC	393	93	212	23.08.23	1	1	1	85	0	NBC	Road
		Kurumul Community School	2	187	Tombil HC	153	37	84	27.08.23	1	1	1	36	0	NBC	Road
		Kurumul Nazarene	262	472	Tombil HC	417	100	215	27.08.23	1	1	1	64	0	NBC	Road
13	Kurumul 2		<b>4,050</b>	<b>4,811</b>		<b>5,192</b>	<b>1,091</b>	<b>2,685</b>		<b>10</b>	<b>10</b>	<b>10</b>	<b>1,015</b>	<b>0</b>		
		Kurumul 2	320	201	Tombil HC	141	50	75	22.08.23	1	1	1	48	0	NBC	Road
		Kunjmung	618	889	Tombil HC	1,247	242	642	23.08.23	1	1	1	197	0	NBC	Road
		Nokmar	755	711	Tombil HC	668	150	357	23.08.23	1	1	1	148	0	NBC	Road
		Kilang	463	425	Tombil HC	425	99	219	22.08.23	1	1	1	98	0	NBC	Road
		Maranban	145	523	Tombil HC	496	100	258	23.08.23	1	1	1	98	0	NBC	Road
		Usnag	396	474	Tombil HC	384	100	200	22.08.23	1	1	1	99	0	NBC	Road

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		Anjinimp	625	346	Tombil HC	540	100	286	23.08.23	1	1	1	96	0	NBC	Road
		Kane Opamil	164	255	Tombil HC	155	50	80	22.08.23	1	1	1	48	0	NBC	Road
		Topi Okup	324	246	Tombil HC	274	50	135	23.08.23	1	1	1	47	0	NBC	Road
		Maranban Plnt	240	740	Tombil HC	862	150	433	22.08.23	1	1	1	136	0	NBC	Road
14	Tombil 1		<b>4,472</b>	<b>4,901</b>		<b>4,590</b>	<b>1,069</b>	<b>2,305</b>		<b>15</b>	<b>15</b>	<b>15</b>	<b>903</b>	<b>0</b>		
		Tombil 1	653	577	Tombil HC	564	100	283	17.08.23	1	1	1	77	0	NBC	Road
		Miltip 1	558	195	Tombil HC	242	50	125	21.08.23	1	1	1	29	0	NBC	Road
		Nol	376	664	Tombil HC	359	150	222	21.08.23	1	1	1	124	0	NBC	Road
		Kugpa	223	261	Tombil HC	195	50	102	21.08.23	1	1	1	43	0	NBC	Road
		Damne	160	559	Tombil HC	499	100	272	18.08.23	1	1	1	95	0	NBC	Road
		Damwarangkga	238	138	Tombil HC	228	50	125	20.08.23	1	1	1	42	0	NBC	Road
		Jimbinkoi	482	340	Tombil HC	249	49	128	20.08.23	1	1	1	25	0	NBC	Road
		Tok	119	123	Tombil HC	186	49	98	20.08.23	1	1	1	48	0	NBC	Road
		Kawil	396	703	Tombil HC	667	142	335	18.08.23	1	1	1	139	0	NBC	Road
		Kukpa	530	241	Tombil HC	515	96	155	18.08.23	1	1	1	69	0	NBC	Road
		Miltip 2	402	466	Tombil HC	318	100	165	21.08.23	1	1	1	79	0	NBC	Road
		Kugark Community School	86	154	Tombil HC	217	50	114	21.08.23	1	1	1	50	0	NBC	Road
		Tombil V/centre	39	326	Tombil HC	192	36	101	18.08.23	1	1	1	36	0	NBC	Road
		Kugark V/c (Girls)	63	0	Tombil HC	80	31	41	21.08.23	1	1	1	31	0	NBC	Road
		Kugark Ebc Mission	147	154	Tombil HC	79	16	39	21.08.23	1	1	1	16	0	NBC	Road
15	Tombil 2		<b>3,408</b>	<b>5,542</b>		<b>3,773</b>	<b>793</b>	<b>1,935</b>		<b>13</b>	<b>13</b>	<b>13</b>	<b>695</b>	<b>0</b>		
		Tombil 2	149	575	Tombil HC	119	27	59	17.08.23	1	1	1	23	0	NBC	Road
		Goimil	456	138	Tombil HC	186	41	96	17.08.23	1	1	1	38	0	NBC	Road
		Piang	621	237	Tombil HC	246	50	131	17.08.23	1	1	1	49	0	NBC	Road
		Kukpa	255	553	Tombil HC	719	100	361	17.08.23	1	1	1	69	0	NBC	Road
		Taimil 1	417	561	Tombil HC	346	94	178	18.08.23	1	1	1	82	0	NBC	Road
		Koru	208	624	Tombil HC	415	92	217	18.08.23	1	1	1	70	0	NBC	Road
		Jimbil	316	392	Tombil HC	93	23	50	17.08.23	1	1	1	23	0	NBC	Road
		Taimil 2	525	1,040	Tombil HC	705	171	370	18.08.23	1	1	1	157	0	NBC	Road
		Tombil Community School	50	354	Tombil HC	183	43	101	17.08.23	1	1	1	43	0	NBC	Road
		Goimil Ebc	22	296	Tombil HC	266	50	133	17.08.23	1	1	1	48	0	NBC	Road
		Sibil Plnt 1	61	237	Tombil HC	174	29	94	17.08.23	1	1	1	27	0	NBC	Road
		Tup Coffee Plantation	192	234	Tombil HC	123	36	58	17.08.23	1	1	1	36	0	NBC	Road
		Segenem Plantation	136	302	Tombil HC	198	37	87	17.08.23	1	1	1	30	0	NBC	Road
16	Kamang 1		<b>1,676</b>													
		Kamang 1	136		Minj HC											Road
		Tumbang	398		Minj HC											Road
		Bala	515		Minj HC											Road
		Geubanem	86		Minj HC											Road
		Djeckbil	249		Minj HC											Road
		Sibil	264		Minj HC											Road
		Tumbang Community School	28		Minj HC											Road
17	Kamang 2		<b>3,719</b>	<b>7,024</b>		<b>6,523</b>	<b>1,225</b>	<b>3,213</b>		<b>9</b>	<b>9</b>	<b>9</b>	<b>1,290</b>	<b>106</b>		
		Kamang 2	67	221	Minj HC											Included Under Tyre Service
		Bomba	275	677	Minj HC	653	146	322	13.08.23	1	1	1	146	5	NBC	Road
		Mekiltakil	484	793	Minj HC	670	122	317	12.08.23	1	1	1	133	17	NBC	Road
		Kupand	698	811	Minj HC	532	95	248	11.08.23	1	1	1	121	69	NBC	Road
		Kana	672	1,085	Minj HC	1,137	218	590	11.08.23	1	1	1	218	2	NBC	Road
		Rot Bung	590	1,163	Minj HC	1,270	261	617	12.08.23	1	1	1	289	9	NBC	Road
		Gusamp	538	997	Minj HC	818	118	386	10.08.23	1	1	1	118	2	NBC	Road
		Bilu Bala	143	620	Minj HC	553	96	279	14.08.23	1	1	1	96	0	NBC	Road
		Simil Waghi Ebc Mission	97	137	Minj HC	101	19	45	11.08.23	1	1	1	19	1	NBC	Road
		Simil Waghi V/Center	154	0	Minj HC											Non Existant
		Tyre Service		521	Minj HC	789	150	409	13.08.23	1	1	1	150	1	NBC	Road
18	Anginmol		<b>4,439</b>	<b>3,640</b>		<b>3,502</b>	<b>760</b>	<b>1,711</b>		<b>6</b>	<b>6</b>	<b>6</b>	<b>774</b>	<b>168</b>		
		Anginmol 1	828	889	Minj HC	1,115	220	544	09.08.23	1	1	1	234	20	NBC	Road
		Kosige 1	567	1,013	Minj HC	802	189	401	09.08.23	1	1	1	189	4	NBC	Road
		Kola	435	0	Minj HC											Non Existant
		Pakna	162	75	Minj HC	84	20	40	16.08.23	1	1	1	20	11	NBC	Road
		Jimbina 1	727	443	Minj HC	684	142	334	10.08.23	1	1	1	142	42	NBC	Road
		Jimbina 2	623	853	Minj HC	641	150	304	10.08.23	1	1	1	150	58	NBC	Road
		Konmil	218	366	Minj HC	176	39	88	08.08.23	1	1	1	39	33	NBC	Road
		Anginmol 2	316	0	Minj HC											Non Existant
		Kosige 2	564	0	Minj HC											Non Existant
19	Ngunba Tsents		<b>4,820</b>													
		Ngunba Tsents	292		Minj HC											Road
		Andakapku	307		Minj HC											Road
		Tomne	342		Minj HC											Road
		Numkua	517		Minj HC											Road
		Kupral	923		Minj HC											Road
		Manjamb	731		Minj HC											Road
		Okip	91		Minj HC											Road
		Gun	595		Minj HC											Road
		Gunwa	510		Minj HC											Road
		Ngunmba	311		Minj HC											Road
		Wara Waghi Pint	201		Minj HC											Road
20	Gabnal		<b>4,074</b>	<b>2,271</b>		<b>2,661</b>	<b>520</b>	<b>1,260</b>		<b>9</b>	<b>9</b>	<b>9</b>	<b>520</b>	<b>44</b>		
		Gabnal	928	202	Minj HC	202	50	97	14.08.23	1	1	1	50	6	NBC	Road
		Kumblang 1	638	303	Minj HC	445	100	210	15.08.23	1	1	1	100	1	NBC	Road
		Sikarap ( 1 )	683	519	Minj HC	525	75	241	14.08.23	1	1	1	75	1	NBC	Road
		Tup	281	244	Minj HC	381	67	177	16.08.23	1	1	1	67	17	NBC	Road
		Sikarap ( 2 )	439	490	Minj HC	369	86	184	15.08.23	1	1	1	86	8	NBC	Road
		Kublang 2	722	221	Minj HC	198	47	93	15.08.23	1	1	1	47	3	NBC	Road

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		Korokaing	372	122	Minj HC	255	48	120	15.08.23	1	1	1	48	1	NBC	Road
		John Bosco Community School	11	86	Minj HC	89	16	41	14.08.23	1	1	1	16	0	NBC	Road
		Sibil		84	Minj HC	197	31	97	14.08.23	1	1	1	31	7	NBC	Road
21	Alua		2,476													
		Alua	454		Minj HC											Road
		Korkor	482		Minj HC											Road
		Tumbang	190		Minj HC											Road
		Dama	413		Minj HC											Road
		Kupa	482		Minj HC											Road
		Kuangware	147		Minj HC											Road
		Kis Boarder	307		Minj HC											Road
22	Gagwa		1,196													
		Gagwa	383		Minj HC											Road
		Dup	223		Minj HC											Road
		Elmar	344		Minj HC											Road
		Kosamil	247		Minj HC											Road
23	Mondomil		1,966													
		Kosanem	391		Minj HC											Road
		Merep	255		Minj HC											Road
		Magemb	110		Minj HC											Road
		Kamang	495		Minj HC											Road
		Minjmu	398		Minj HC											Road
		Bukambang	216		Minj HC											Road
		Mondomil C/S	99		Minj HC											Road
24	Olubus		3,019	2,766		2,872	544	1,419		6	6	6	544	66		
		Olubus	575	309	Minj HC	315	75	168	08.08.23	1	1	1	75	17	NBC	Road
		Pisngil	482	155	Minj HC	641	125	304	08.08.23	1	1	1	125	9	NBC	Road
		Konjambi Konsar	272	626	Minj HC	427	70	207	08.08.23	1	1	1	70	0	NBC	Road
		Kumbuku	448	360	Minj HC	255	50	118	08.08.23	1	1	1	50	2	NBC	Road
		Kola	707	551	Minj HC	473	99	255	08.08.23	1	1	1	99	27	NBC	Road
		Waghi Block	534	765	Minj HC	761	125	367	11.08.23	1	1	1	125	11	NBC	Road
25	Pukamil		3,269	2,224		2,391	467	1,223		8	8	6	0	0		
		Pukamil	415	390	Tsigmal HC	493	99	261	14.08.23	1	1	1	0			Road
		Kopung	962	381	Tsigmal HC	489	92	245	13.08.23	1	1	1	0		93 FM	Road
		Mangi	387	335	Tsigmal HC	371	64	190	13.08.23	1	1	1	0			Road
		Wasne	272	80	Tsigmal HC	117	28	68	14.08.23	1	1	1	0		93 FM	Road
		Timekuin	387	221	Tsigmal HC	217	49	114	14.08.23	1	1	1	0		93 FM	Road
		Muruka Community School	13	292	Tsigmal HC	125	26	68	13.08.23	1	1	1	0		93 FM	Road
		Kore Ware Block	270	257	Tsigmal HC	271	62	140	13.08.23	1	1	0	0		95.5 FM	Road
		Kikwil Block	562	268	Tsigmal HC	308	47	137	13.08.23	1	1	0	0			Road
26	Tsigmil		6,236	5,119		4,950	979	2,554		18	18	5	0	0		
		Tsigmil	368	134	Tsigmal HC	296	49	152	11.08.23	1	1	1	0		93 FM	Road
		Wamol	396	295	Tsigmal HC	184	31	98	11.08.23	1	1	0	0		93 FM	Road
		Akomol	309	460	Tsigmal HC	421	85	220	11.08.23	1	1	0	0		95.5 FM	Road
		Balne	192	122	Tsigmal HC	317	50	158	10.08.23	1	1	1	0		93 FM	Road
		Kupisker	257	173	Tsigmal HC	96	36	56	11.08.23	1	1	0	0		95.5 FM	Road
		Koropokap	123	291	Tsigmal HC	210	43	108	11.08.23	1	1	0	0		93 FM	Road
		Daru	720	369	Tsigmal HC	355	63	164	11.08.23	1	1	0	0		93 FM	Road
		Tuk	197	126	Tsigmal HC	90	22	48	12.08.23	1	1	0	0		93 FM	Road
		Umna	586	232	Tsigmal HC	304	56	152	09.08.23	1	1	1	0		93 FM	Road
		Kumneng	257	231	Tsigmal HC	216	50	107	09.08.23	1	1	0	0		93 FM	Road
		Danal	608	1,002	Tsigmal HC	801	172	435	09.08.23	1	1	0	0		93 FM	Road
		Dond ( 1 )	502	386	Tsigmal HC											Non Existant
		Bukil	493	537	Tsigmal HC	333	59	181	09.08.23	1	1	0	0		93 FM	Road
		Waghi Block	223	163	Tsigmal HC	279	50	136	10.08.23	1	1	0	0			Road
		Kulangin	216	233	Tsigmal HC	283	60	151	12.08.23	1	1	0	0			Road
		Korpen	264	167	Tsigmal HC	277	58	146	11-12.08.23	1	1	1	0		93 FM	Road
		Kolke	342	43	Tsigmal HC	115	20	54	12.08.23	1	1	0	0			Road
		Tsigmil Ebc Mission	184	157	Tsigmal HC	160	26	79	11.08.23	1	1	1	0		93 FM	Road
		Mumah		NEW	Tsigmal HC	213	49	109	13.08.23	1	1	0	0			Road/Trek
27	Bekpe		1,561	4,230		3,405	608	1,689		7	6	1	4	0		
		Bekpe	164	665	Tsigmal HC	905	150	439	08-09.08.23	1	1	0	0	0	91.5 FM	Road
		Gewi 1	378	707	Tsigmal HC	635	126	327	09-10.08.23	1	1	0	1	0	94.7 FM	Road
		Gewi 2	432	431	Tsigmal HC	151	30	75	09.08.23	1	1	0	1	0	94.7 FM	Road
		Dong	236	0	Tsigmal HC	337	55	165	10.08.23	1	1	0	0			Road
		Danal Community School	6	656	Tsigmal HC	636	112	330	09-10.08.23	1	1	0	1	0	93 FM	Road
		Kumbal Block	95	852	Tsigmal HC	741	135	353	02.08.23	1	1	1	1	0	NBC	Road
		Waghi Bruk	249	919	Tsigmal HC					1						Included Under Kumbal Block
28	Tumba		1,375													
		Tumba	292		Tsigmal HC											Road
		Tapia	210		Tsigmal HC											Road
		Anginbe	141		Tsigmal HC											Road
		Koponong	65		Tsigmal HC											Road
		Gokmil	84		Tsigmal HC											Road
		Millen	136		Tsigmal HC											Road
		Deibar	134		Tsigmal HC											Road
		Woi	143		Tsigmal HC											Road
		Ngumba	117		Tsigmal HC											Road
		Imba	54		Tsigmal HC											Road
29	Numgil		1,202													
		Numgil	132		Tsigmal HC											Road
		Balne	361		Tsigmal HC											Road
		Ok	199		Tsigmal HC											Road

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		Kosba	147		Tsignal HC											Road
		Wara Numants			Tsignal HC											Road
		Keukil	186		Tsignal HC											Road
		Kasgan	151		Tsignal HC											Road
		Numants Community School	26		Tsignal HC											Road
30	Kugmar		1,743													
		Kugmar	158		Tsignal HC											Road
		Bangam	778		Tsignal HC											Road
		Tumwamol	378		Tsignal HC											Road
		Wambi	216		Tsignal HC											Road
		Dirbin	117		Tsignal HC											Road
		Moiabe	74		Tsignal HC											Road
		Kolinmaran	22		Tsignal HC											Road
		Konsibal			Tsignal HC											Road
31	Ngamar		2,022													
		Ngamar	119		Tsignal HC											Road
		Kasbal	605		Tsignal HC											Road
		Angin Monan	424		Tsignal HC											Road
		Mangil	329		Tsignal HC											Road
		Bokbake	348		Tsignal HC											Road
		Djek 1	197		Tsignal HC											Road
32	Djek		3,246													
		Djek 2	675		Tsignal HC											Road
		Komaning	497		Tsignal HC											Road
		Goke 1	251		Tsignal HC											Road
		Tauki	368		Tsignal HC											Road
		Omong	236		Tsignal HC											Road
		Tukme	357		Tsignal HC											Road
		Garmangnok	344		Tsignal HC											Road
		Goke 2	519		Tsignal HC											Road
33	Yeu 1		264	345		300	67	168		1	0	0	0	0		
		Dapdami	76	37	Mt. Au HC											Non Existant
		Kurumuk	188	308	Mt. Au HC	300	67	168	04.12.23	1	0	0	0	0		
34	Mt. Au		506	379		841	178	469		3	0	0	0	0		
		Mt Au	210	105	Mt. Au HC	182	36	93	04.12.23	1	0	0	0	0		
		Elwil	218	166	Mt. Au HC	544	118	313	05.12.23	1	0	0	0	0		
		Mt Au Station	78	108	Mt. Au HC	115	24	63	04.12.23	1	0	0	0	0		
35	Ambopane		223	115												
		Ambopane	223	115	Mt. Au HC											Non Existant
36	Yeu 2		422	393		617	103	320		2	0	0	0	0		
		Sikoi	199	264	Mt. Au HC	307	53	162	04.12.23	1	0	0	0	0		
		New Camp	223	129	Mt. Au HC	310	50	158	05.12.23	1	0	0	0	0		
37	Olate		558	0												
		Olate	558	0	Mt. Au HC											Non Existant
38	Plati		160	0												
		Palti	160	0	Mt. Au HC											Non Existant
39	Tesa		188	133												
		Tesa	188	133	Mt. Au HC											Non Existant
40	Wusinge		48	188												
		Wusinge	48	188	Mt. Au HC											Non Existant
41	Meru		644	647		574	102	312		4	0	0	0	0		
		Meru	259	225	Mt. Au HC	212	37	116	04.12.23	1	0	0	0	0		
		Mamne Tsents	177	135	Mt. Au HC	138	30	72	05.12.23	1	0	0	0	0		
		Kumbang	208	0	Mt. Au HC											Non Existant
		Olu		76	Mt. Au HC	147	20	80	04.12.23	1	0	0	0	0		
		Kordi		82	Mt. Au HC	77	15	44	04.12.23	1	0	0	0	0		
		Munku		128	Mt. Au HC											Non Existant
42	Tandambak		681	485		173	34	81		1	0	0	0	0		
		Tandambak	482	176	Mt. Au HC	173	34	81	05.12.23	1	0	0	0	0		
		Au	199	309	Mt. Au HC											Covered in Mt Au
43	Minj Urban		1,708													
		Police Residential	614		Minj HC											Road
		Minj Community School	549		Minj HC											Road
		Commercial/High School	545		Minj HC											Road

# ANNEX TWO

## JIWAKA PROVINCE NORTH WAGHI POPULATION 2023 LLIN DISTRIBUTION PLANNING SHEET

	Altitude
	Above 2000 m
	1600-2000 m
	1200-1600 m
	Less than 1200m

LLG	WARD	VILLAGE	Estimated 2023 Data Based On 2000 Census	Estimated 2023 Data Based On 2020 Data	Health Centre	Population Surveyed	House Holds Surveyed	Nets Issued	Date Of Distribution	Villages	Digicel	Bmobile	Houses With Phones	Houses With Radios	Radio Networks	Comments
<b>NORTH WAGHI</b>			<b>126,731</b>	<b>126,731</b>		<b>102,172</b>	<b>19,613</b>	<b>50,544</b>		<b>216</b>	<b>207</b>	<b>205</b>	<b>5,705</b>	<b>2,758</b>	<b>206</b>	
<b>NORTH WAGHI RURAL</b>			<b>126,731</b>	<b>93,978</b>		<b>102,172</b>	<b>19,613</b>	<b>50,544</b>		<b>216</b>	<b>207</b>	<b>205</b>	<b>5,705</b>	<b>2,758</b>	<b>206</b>	
1	Kimil 1		<b>8,238</b>	<b>9,281</b>		<b>8,828</b>	<b>1,947</b>	<b>4,575</b>		<b>18</b>	<b>18</b>	<b>18</b>	<b>1,414</b>			
		Kolmanga	293	320	Kimil HC	481	100	239	01.09.23	1	1	1	65		FM/NBC	Road
		Randa	895	424	Kimil HC	624	140	323	31.08.23	1	1	1	113		FM/NBC	Road
		Kimil Station 1		NEW	Kimil HC	368	70	155	06.09.23	1	1	1	60		FM/NBC	Road
		Kimil Station 2		510	Kimil HC	733	150	360	31.08.23	1	1	1	98		FM/NBC	Road
		Maramb		628	Kimil HC	658	150	350	31.08.23	1	1	1	114		FM/NBC	Road
		Mur	191	273	Kimil HC	158	40	79	31.08.23	1	1	1	19		FM/NBC	Road
		Paka	159	403	Kimil HC	227	100	128	31.08.23	1	1	1	67		FM/NBC	Road
		Gelgang	149	557	Kimil HC	213	58	112	30.08.23	1	1	1	47		FM/NBC	Road
		Kuman	447	236	Kimil HC	125	45	123	30.08.23	1	1	1	19		FM/NBC	Road
		Kulpi	274	267	Kimil HC	186	43	93	30.08.23	1	1	1	43		FM/NBC	Road
		Auri	398	410	Kimil HC	364	100	187	30.08.23	1	1	1	51		FM/NBC	Road
		Kowi Saw Mill	946	796	Kimil HC	632	140	319	30.08.23	1	1	1	115		FM/NBC	Road
		Kimil Plnt	134	608	Kimil HC	399	100	207	04.09.23	1	1	1	71		FM/NBC	Road
		Ok Plantation	1,535	1,004	Kimil HC	800	148	414	04.09.23	1	1	1	92		FM/NBC	Road
		Koban Plt Div.2	1,689	841	Kimil HC	831	150	419	31.08.23	1	1	1	64		FM/NBC	Road
		Koban Plnt Div. 3	1,127	884	Kimil HC	533	113	275	02.09.23	1	1	1	90		FM/NBC	Road
		Kimil Div. 4	0	491	Kimil HC	784	150	429	04.09.23	1	1	1	143		FM/NBC	Road
		Koskala	0	628	Kimil HC	712	150	363	02.09.23	1	1	1	143		FM/NBC	Road
2	Kimil 2		<b>2,782</b>	<b>2,967</b>		<b>3,235</b>	<b>644</b>	<b>1,636</b>		<b>8</b>	<b>8</b>	<b>8</b>	<b>437</b>			
		Kalpang Lutheran	831	686	Kimil HC	911	150	465	29.08.23	1	1	1	63		FM/NBC	Road
		Olmep Gupalm	301	211	Kimil HC	169	30	81	30.08.23	1	1	1	25		FM/NBC	Road
		Gulka	423	393	Kimil HC	244	46	124	30.08.23	1	1	1	31		FM/NBC	Road
		Angri	330	323	Kimil HC	426	85	201	29.08.23	1	1	1	81		FM/NBC	Road
		New Kem	308	319	Kimil HC	343	78	177	29.08.23	1	1	1	63		FM/NBC	Road
		Gupnimp	259	344	Kimil HC	357	77	186	29.08.23	1	1	1	57		FM/NBC	Road
		Oldo	112	257	Kimil HC	346	78	172	31.08.23	1	1	1	41		FM/NBC	Road
		Bundi Block	218	433	Kimil HC	439	100	230	29.08.23	1	1	1	76		FM/NBC	Road
3	Bunumwo		<b>12,359</b>	<b>12,372</b>		<b>11,377</b>	<b>2,346</b>	<b>5,868</b>		<b>27</b>	<b>27</b>	<b>27</b>	<b>1,661</b>			
		Kalanga Kunda	279	362	Kimil HC	477	96	254	23.08.23	1	1	1	69		FM/NBC	Road
		Kalanga 1	428	384	Kimil HC	390	100	202	29.08.23	1	1	1	93		FM/NBC	Road
		Kalanga 2	636	441	Kimil HC	439	76	224	28.08.23	1	1	1	40		FM/NBC	Road
		Goulie	332	273	Kimil HC	234	50	123	26.08.23	1	1	1	37		FM/NBC	Road
		Wabag/Tari Block	863	639	Kimil HC	468	100	244	26.08.23	1	1	1	67		FM/NBC	Road
		Kilip Goi	237	282	Kimil HC	229	50	119	26.08.23	1	1	1	41		FM/NBC	Road
		Kupnung	210	281	Kimil HC	248	50	127	24.08.23	1	1	1	44		FM/NBC	Road
		Mungal	306	279	Kimil HC	253	50	126	24.08.23	1	1	1	32		FM/NBC	Road
		Numanz	599	504	Kimil HC	494	100	243	25.08.23	1	1	1	97		FM/NBC	Road
		Bung	420	469	Kimil HC	539	100	266	28.08.23	1	1	1	93		FM/NBC	Road
		Moimb	616	308	Kimil HC	570	95	282	28.08.23	1	1	1	77		FM/NBC	Road
		Bunumwo 2	425	353	Kimil HC	105	24	50	22.08.23	1	1	1	16		FM/NBC	Road
		Bunumwo 1	266	325	Kimil HC	256	39	126	29.08.23	1	1	1	38		FM/NBC	Road
		Bunumwo Market	323	311	Kimil HC	191	37	97	22.08.23	1	1	1	23		FM/NBC	Road
		Sigri Mountain	1,166	923	Kimil HC	839	200	458	22.08.23	1	1	1	133		FM/NBC	Road
		Sigri Wamne	408	924	Kimil HC	1,041	200	556	22.08.23	1	1	1	14		FM/NBC	Road
		Kupkap	161	416	Kimil HC	420	83	212	23.08.23	1	1	1	78		FM/NBC	Road
		Sigri Daunbilo	785	840	Kimil HC	930	184	467	22.08.23	1	1	1	95		FM/NBC	Road
		Wara Ane	262	380	Kimil HC	231	50	118	22.08.23	1	1	1	49		FM/NBC	Road
		Kalanga Plnt/Kp Lodge	526	144	Kimil HC	189	38	94	29.08.23	1	1	1	37		FM/NBC	Road
		Bunumwo Plnt	1,027	1,772	Kimil HC	1,019	256	555	26.08.23	1	1	1	191		FM/NBC	Road
		Sigri Community School	34	131	Kimil HC	48	9	24	28.08.29	1	1	1	5		FM/NBC	Road
		Citc	1,090	763	Kimil HC	585	128	301	24.08.23	1	1	1	128		FM/NBC	Road
		Waghi Mek Plnt(Sigri )	193	219	Kimil HC	226	50	111	30.08.23	1	1	1	30		FM/NBC	Road
		Wr Carpenters Plnt (Sigri )	768	393	Kimil HC	483	100	249	27.08.23	1	1	1	70		FM/NBC	Road
		Waghi Valley Sec School		255	Kimil HC	209	31	107	28.08.23	1	1	1	25		FM/NBC	Road
		Momgie		0	Kimil HC	264	50	133	28.08.23	1	1	1	39		FM/NBC	Road
4	Koskala 2		<b>3,601</b>	<b>2,867</b>		<b>2,870</b>	<b>676</b>	<b>1,431</b>		<b>7</b>	<b>7</b>	<b>7</b>	<b>0</b>	<b>112</b>		
		Koskala No.2	890	874	Fatima HC	964	270	494	04.08.23	1	1	1	10		NBC	Road
		Goldop	386	367	Fatima HC	332	74	158	04.08.23	1	1	1	6		NBC	Road
		Goldop Ombuna	291	464	Fatima HC	196	56	103	04.08.23	1	1	1	27		NBC	Road
		Kala	621	406	Fatima HC	452	100	225	03.08.23	1	1	1	26		NBC	Road
		Bulunz	442	233	Fatima HC	438	75	213	04.08.23	1	1	1	25		NBC	Road
		Balis	296	217	Fatima HC	125	18	59	04.08.23	1	1	1	9		NBC	Road
		Karkopi Plnt	675	305	Fatima HC	363	83	179	05.08.23	1	1	1	9		NBC	Road
5	Koskala 1		<b>4,796</b>	<b>4,719</b>		<b>5,822</b>	<b>1,194</b>	<b>2,902</b>		<b>16</b>	<b>16</b>	<b>8</b>	<b>0</b>	<b>207</b>		
		Kombulno	506	424	Fatima HC	381	88	193	08.08.23	1	1	1	40		NBC	Road
		Kupnung	406	110	Fatima HC	242	45	121	08.08.23	1	1	1	2		NBC	Road
		Top Klab	154	173	Fatima HC	177	20	83	07.08.23	1	1	0	5		NBC	Road
		Murkumb	200	160	Fatima HC	220	49	112	07.08.23	1	1	0	9		NBC	Road
		Kaplong	374	203	Fatima HC	265	50	132	08.08.23	1	1	0	3		NBC	Road
		Kumuk	269	238	Fatima HC	350	46	164	08.08.23	1	1	0	0		NBC	Road
		Karawagl	1,010	849	Fatima HC	831	198	409	09.08.23	1	1	1	7		NBC	Road
		Bunumol	340	152	Fatima HC	233	46	114	07.08.23	1	1	0	0		NBC	Road
		Koskamol	264	154	Fatima HC	266	50	129	07.08.23	1	1	0	7		NBC	Road
		Fatima V/ Centre	93	144	Fatima HC	223	50	118	01.08.23	1	1	1	28		NBC	Road
		Fatima Plnt	467	297	Fatima HC	370	75	178	03.08.23	1	1	1	1		NBC	Road
		Waghi Mek Plnt	279	214	Fatima HC	270	45	132	07.08.23	1	1	0	4		NBC	Road

LLG	WARD	VILLAGE	Estimated 2023 Data Based On 2000 Census	Estimated 2023 Data Based On 2020 Data	Health Centre	Population Surveyed	House Holds Surveyed	Nets Issued	Date Of Distribution	Villages	Digicel	Bmobile	Houses With Phones	Houses With Radios	Radio Networks	Comments
		Fatima Cath. Mission	115	10	Fatima HC	31	15	22	01.08.23	1	1	1		7	NBC	Road
		Fatima Secondary	51	423	Fatima HC	501	96	250	01.08.23	1	1	1		39	NBC	Road
		Good Sherperd Coll	269	55	Fatima HC	49	20	32	01.08.23	1	1	1		11	NBC	Road
		<b>Warakar</b>		1,113	Fatima HC	1,413	301	713	11.08.23	1	1	1		44	NBC	Road
6	Kakinjep		<b>7,568</b>	<b>8,140</b>		<b>12,882</b>	<b>2,065</b>	<b>6,169</b>		<b>17</b>	<b>16</b>	<b>5</b>	<b>0</b>	<b>508</b>		
		Kakinjep	738	970	Banz2 HC	1,067	170	515	07.08.23	1	1	1		73	NBC	Road
		Kisikwana	423	435	Banz2 HC	506	96	241	11.08.23	1	1	0		7	NBC	Road
		Angnimp	714	237	Banz2 HC					1						Under Block Wan
		Juboko	310	399	Banz2 HC	418	81	205	03.08.23	1	1	0		4	NBC	Road
		Block Wan	658	850	Banz2 HC	1,375	234	661	01.08.23	1	1	1		34	NBC	Road
		Dallapia	328	667	Banz2 HC	1,662	350	791	01.08.23	1	1	0		6	NBC	Road
		Dalwa	469	793	Banz2 HC	786	149	396	02.08.23	1	1	0		14	NBC	Road
		Baming Polong	254	365	Banz2 HC	602	118	308	02.08.23	1	1	0		11	NBC	Road
		Band	477	222	Banz2 HC					1	1					Under Kumuka
		Wana	479	584	Banz2 HC	819	150	401	03.08.23	1	1	0		23	NBC	Road
		Waghi Valley Kumuka	599	851	Banz2 HC	2,350	224	1,063	09.08.23	1	1	1		135	NBC	Road
		Block Two	836	115	Banz2 HC	722	92	335	09.08.23	1	1	0		83	NBC	Road
		Olmants	191	342	Banz2 HC	470	93	232	31.07.23	1	1	1		59	NBC	Road
		Kilip Kaipela	452	715	Banz2 HC	1,028	146	501	09.08.23	1	1	0		42	NBC	Road
		Waghi Mek Plnt	252	225	Banz2 HC	723	88	339	09.08.23	1	1				NBC	Road
		Kopor Plnt	147	107	Banz2 HC	99	24	55	01.08.23	1	1	1		15	NBC	Road
		Aba Plnt	242	263	Banz2 HC	255	50	126	31.07.23	1	1	0		2	NBC	Road
7	Molka		<b>7,583</b>	<b>7,982</b>		<b>7,502</b>	<b>1,348</b>	<b>3,642</b>		<b>12</b>	<b>12</b>	<b>12</b>	<b>0</b>	<b>506</b>		
		Molka	308	782	Banzwan HC	771	149	383	14.08.23	1	1	1		14	99.9 FM	Road
		Pak	550	472	Banzwan HC	574	100	282	12.08.23	1	1	1		92	99.9 FM	Road
		Kambim	552	363	Banzwan HC	351	50	171	15.08.23	1	1	1		17	99.9 FM	Road
		Jelinga	357	315	Banzwan HC	316	57	153	11.08.23	1	1	1		15	99.9 FM	Road
		Golmol	445	646	Banzwan HC	239	49	115	11.08.23	1	1	1		34	99.9 FM	Road
		Kana	367	640	Banzwan HC	797	150	386	11.08.23	1	1	1		67	99.9 FM	Road
		Koilmba	178	254	Banzwan HC	305	50	167	15.08.23	1	1	1		0	99.9 FM	Road
		Eltimb	1,102	989	Banzwan HC	1,162	200	559	15.08.23	1	1	1		64	99.9 FM	Road
		Sipil	1,777	1,541	Banzwan HC	966	137	459	10.08.23	1	1	1		51	99.9 FM	Road
		Munump	1,283	1,244	Banzwan HC	985	207	467	09.08.23	1	1	1		74	99.9 FM	Road
		Dom Block	345	126	Banzwan HC	225	49	110	09.08.23	1	1	1		22	99.9 FM	Road
		Ombuld	318	612	Banzwan HC	811	150	390	08.08.23	1	1	1		56	99.9 FM	Road
8	Kwiona.1		<b>1,880</b>			<b>2,410</b>	<b>412</b>	<b>1,195</b>		<b>7</b>	<b>7</b>	<b>7</b>	<b>0</b>	<b>67</b>		
		Kwiona 1	200		Banzwan HC	277	50	138	24.08.23	1	1	1		2	99.9 FM	Road
		Kusunguna (Laswari)	130		Banzwan HC	230	50	121	24.08.23	1	1	1		0	99.9 FM	Road
		Amik	296		Banzwan HC	486	50	244	24.08.23	1	1	1		33	99.9 FM	Road
		Kaunang	222		Banzwan HC	323	40	149	24.08.23	1	1	1		29	99.9 FM	Road
		Kurrap	174		Banzwan HC	293	50	141	24.08.23	1	1	1		3	99.9 FM	Road
		Aprup 1	325		Banzwan HC	291	72	152	24.08.23	1	1	1		0	99.9 FM	Road
		Kopnga	533		Banzwan HC	510	100	250	26.08.23	1	1	1		0	99.9 FM	Road
9	Kwiona.2		<b>1,520</b>			<b>1,631</b>	<b>325</b>	<b>828</b>		<b>5</b>	<b>5</b>	<b>5</b>	<b>0</b>	<b>24</b>		
		Gera	254		Banzwan HC	203	50	95	24.08.23	1	1	1		2	99.9 FM	Road
		Dongil	156		Banzwan HC	236	49	121	24.08.23	1	1	1		0	99.9 FM	Road
		Aukbea	196		Banzwan HC											Non Existant
		Aprip	122		Banzwan HC	100	26	56	26.08.23	1	1	1		7	99.9 FM	Road
		Banzamil	293		Banzwan HC	587	100	293	24.08.23	1	1	1		0	99.9 FM	Road
		Warala	499		Banzwan HC	505	100	263	24.08.23	1	1	1		15	99.9 FM	Road
10	Dumbola		<b>5,261</b>	<b>6,494</b>		<b>7,229</b>	<b>1,381</b>	<b>3,612</b>		<b>19</b>	<b>18</b>	<b>18</b>	<b>0</b>	<b>212</b>		
		Dumbola	413	576	Banzwan HC	470	99	231	08.08.23	1	1	1	0	13	99.9 FM	Road
		Ka-Ombuna	237	392	Banzwan HC	345	69	168	07.08.23	1	1	1		4	99.9 FM	Road
		Noltupa	259	169	Banzwan HC	319	49	157	07.08.23	1	1	1		17	99.9 FM	Road
		Gugu Kondol	364	294	Banzwan HC	223	68	108	09.08.23	1	1	1		5	99.9 FM	Road
		Nukem Ombuntape	332	431	Banzwan HC	580	99	286	07-09.08.23	1	1	1		19	99.9 FM	Road
		Kulamb	457	910	Banzwan HC	750	144	366	09.08.23	1	1	1	0	78	99.9 FM	Road
		Waghi Block		349	Banzwan HC	471	100	227	07.08.23	1	1	1		25	99.9 FM	Road
		<b>Banz Luth Day H/S</b>		270	Banzwan HC	196	37	96	06.08.23	1	1	1		0	99.9 FM	Road
		Kongambil	318	318	Banzwan HC	488	100	257	05.08.23	1	1	1		2	99.9 FM	Road
		Ausol-Kalawol	562	576	Banzwan HC	542	124	287	05.08.23	1	1	1		0	99.9 FM	Road
		Kuimara	220	429	Banzwan HC	596	71	291	07.08.23	1	1	1		41	99.9 FM	Road
		Singinda	262	368	Banzwan HC	441	100	232	07.08.23	1	1	1		0	99.9 FM	Road
		Gurnel	142	113	Banzwan HC	311	50	163	05.08.23	1	1	1		0	99.9 FM	Road
		Ararim	320	0	Banzwan HC	144	22	76	07.08.23	1	1	1		5	99.9 FM	Road
		Kanipas	127	201	Banzwan HC					1						Covered under Wamol
		Ambine	540	496	Banzwan HC	533	100	268	16.08.23	1	1	1		3	99.9 FM	Road
		Wamol	144	281	Banzwan HC	167	31	79	12.08.23	1	1	1		0	99.9 FM	Road
		Lutheran College	254	321	Banzwan HC	383	72	186	06.08.23	1	1	1		0	99.9 FM	Road
		Lutheran Mission	308	0	Banzwan HC	270	46	134	07.08.23	1	1	1		0	99.9 FM	Road
11	Talu		<b>8,052</b>	<b>5,405</b>		<b>7,244</b>	<b>1,205</b>	<b>3,599</b>		<b>15</b>	<b>15</b>	<b>15</b>	<b>0</b>	<b>346</b>		
		Talu 1	1,498	254	Banzwan HC	400	50	195	03.08.23	1	1	1		44	99.9 FM	Road
		Kurmul	347	203	Banzwan HC	289	50	142	03.08.23	1	1	1		0	99.9 FM	Road
		Malu	562	120	Banzwan HC	539	50	258	03.08.23	1	1	1		0	99.9 FM	Road
		Bints	1,080	500	Banzwan HC	662	99	312	01.08.23	1	1	1		95	99.9 FM	Road
		Kip		NEW	Banzwan HC	541	99	261	06.08.23	1	1	1		23	99.9 FM	Road
		Kip Koimba	829	1,076	Banzwan HC	407	70	211	06.08.23	1	1	1		21	99.9 FM	Road
		Madang	790	310	Banzwan HC	512	95	257	03.08.23	1	1	1		21	99.9 FM	Road
		Talu 2	418	1,335	Banzwan HC	1,238	249	622	04.08.23	1	1	1		75	99.9 FM	Road
		Gurnell	284	0	Banzwan HC	488	50	254	17.08.23	1	1	1		0	99.9 FM	Road
		Watalili Blok	438	248	Banzwan HC	295	47	141	03.08.23	1	1	1		1	99.9 FM	Road
		Kandal Blok	631	494	Banzwan HC	572	100	277	03.08.23	1	1	1		2	99.9 FM	Road
		Nombon Guralpe	467	472	Banzwan HC	405	100	204	04.08.23	1	1	1		2	99.9 FM	Road
		Waghi Mek Plnt (Factory)	345	351	Banzwan HC	400	50	197	04.08.23	1	1	1	0			
		Karmal Plantation	200	40	Banzwan HC	219										

LLG	WARD	VILLAGE	Estimated 2023 Data Based On 2000 Census	Estimated 2023 Data Based On 2020 Data	Health Centre	Population Surveyed	House Holds Surveyed	Nets Issued	Date Of Distribution	Villages	Digicel	Bmobile	Houses With Phones	Houses With Radios	Radio Networks	Comments
		Mintal Plantation	164	0	Banzwan HC	277	50	143	#REF!	1	1	1		27	99.9 FM	Road
12	Kendu		<b>8,177</b>	<b>10,314</b>		<b>10,389</b>	<b>2,079</b>	<b>5,219</b>		<b>20</b>	<b>20</b>	<b>20</b>	<b>20</b>	<b>612</b>		
		Kendu	501	789	Banzwan HC	533	147	280	01.08.23	1	1	1	19	19	99.9 FM	Road
		Binsku	227	568	Banzwan HC	713	100	343	02.08.23	1	1	1		30	99.9 FM	Road
		Ambang	601	320	Banzwan HC	242	69	119	02.08.23	1	1	1		39	99.9 FM	Road
		Tupa	780	463	Banzwan HC	302	100	164	02.08.23	1	1	1		43	99.9 FM	Road
		Kendu Baiman	442	512	Banzwan HC	858	97	439	01.08.23	1	1	1		15	99.9 FM	Road
		Kosuwa	227	363	Banzwan HC	465	99	256	01.08.23	1	1	1		24	99.9 FM	Road
		Kisap	303	694	Banzwan HC	914	150	432	06.08.23	1	1	1	1	51	99.9 FM	Road
		Bilu	721	570	Banzwan HC	233	100	124	01.08.23	1	1	1		6	99.9 FM	Road
		Tola	482	447	Banzwan HC	531	100	261	01.08.23	1	1	1		65	99.9 FM	Road
		Karmal	486	664	Banzwan HC	433	111	232	01.08.23	1	1	1		109	99.9 FM	Road
		Waghi Block	337	340	Banzwan HC	329	98	173	01.08.23	1	1	1		50	99.9 FM	Road
		Kerowil	438	528	Banzwan HC	547	146	281	01.08.23	1	1	1		4	99.9 FM	Road
		Bariya	565	887	Banzwan HC	925	200	443	01.08.23	1	1	1		22	99.9 FM	Road
		Nangamb	582	779	Banzwan HC	784	150	387	01.08.23	1	1	1		0	99.9 FM	Road
		Gusamp	462	461	Banzwan HC	360	50	172	02.08.23	1	1	1	0	0	99.9 FM	Road
		Kasgana	376	543	Banzwan HC	541	100	256	01.08.23	1	1	1		39	99.9 FM	Road
		Yapa	589	682	Banzwan HC	448	42	223	02.08.23	1	1	1		16	99.9 FM	Road
		Ambang Community School	15	37	Banzwan HC	119	20	60	02.08.23	1	1	1		2	99.9 FM	Road
		Kisap Community School	42	342	Banzwan HC	742	100	374	02.08.23	1	1	1		24	99.9 FM	Road
		Pazero EBC		323	Banzwan HC	370	100	200	01.08.23	1	1	1		54	99.9 FM	Road
13	Bolimba		<b>3,694</b>			<b>794</b>	<b>149</b>	<b>395</b>		<b>2</b>	<b>2</b>	<b>4</b>	<b>56</b>	<b>0</b>		
		Bolimba	506		Dona SHC											Road
		Polongmur	596		Dona SHC											Road
		Dalbal	643		Dona SHC											Road
		Tapia	384		Dona SHC											Road
		Wana	345		Dona SHC											Road
		Bomol	340		Dona SHC											Road
		Donu	235		Dona SHC	212	49	115	02.08.23	1	1	2	36	0	FM	Not supposed to be covered but done due to HC advise
		Kalmang	638		Dona SHC	582	100	280	02.08.23	1	1	2	20	0	FM	Not supposed to be covered but done due to HC advise
		Kalmang Plnt	7		Dona SHC											Road
14	Numbkora		<b>2,860</b>			<b>353</b>	<b>69</b>	<b>170</b>		<b>1</b>	<b>1</b>	<b>2</b>	<b>24</b>	<b>0</b>		
		Numbkora	755		Dona SHC											Road
		Malamb	306		Dona SHC											Road
		Nende	391		Dona SHC	353	69	170	03.08.23	1	1	2	24	0	FM	Not supposed to be covered but done due to HC advise
		Nounang	672		Dona SHC											Road
		Kumbal	736		Dona SHC											Road
15	Milep 1		<b>2,792</b>													
		Kala (Milep 1)	728		Norba HC											Road
		Malbanga	362		Norba HC											Road
		Kapolong	535		Norba HC											Road
		Dire	433		Norba HC											Road
		Norba 1	660		Norba HC											Road
		Milep Comm/School	29		Norba HC											Road
		Norba S/Health Centre	44		Norba HC											Road
16	Milep 2		<b>1,877</b>													
		Norba 2	347		Norba HC											Road
		Olo	819		Norba HC											Road
		Tolpa	711		Norba HC											Road
17	Onil		<b>2,066</b>													
		Dalkan Kwiona	340		Norba HC											Road
		Waplekan Kumora	252		Norba HC											Road
		Koploka Nonge Emil	303		Norba HC											Road
		Koploka Ju Dai	196		Norba HC											Road
		Konskan Nol Egel	335		Norba HC											Road
		Tepngakan Tapia	188		Norba HC											Road
		Kuntka Ombuna	452		Norba HC											Road
18	Kaming		<b>2,694</b>													
		Sewula	550		Norba HC											Road
		Polonga	230		Norba HC											Road
		Koskala	342		Norba HC											Road
		Korop Mii	594		Norba HC											Road
		Nolbombo	406		Norba HC											Road
		Mundu	555		Norba HC											Road
		Kaming Comm/School	17		Norba HC											Road
19	Munumul		<b>8,519</b>													
		Munumul	574		Nondugl HC											Road
		Ombundapi	763		Nondugl HC											Road
		Kurumba	506		Nondugl HC											Road
		Kondowil	2,061		Nondugl HC											Road
		Kumbal Kokonat	1,066		Nondugl HC											Road
		Kalke	550		Nondugl HC											Road
		Nondubal	249		Nondugl HC											Road
		Golump	702		Nondugl HC											Road
		Kupand	198		Nondugl HC											Road
		Guspa	1,824		Nondugl HC											Road
		Ombuntapi Com/School	27		Nondugl HC											Road
		Last Wara			Nondugl HC											Road
20	Nondugl		<b>3,684</b>													

LLG	WARD	VILLAGE	Estimated 2023 Data Based On 2000 Census	Estimated 2023 Data Based On 2020 Data	Health Centre	Population Surveyed	House Holds Surveyed	Nets Issued	Date Of Distribution	Villages	Digicel	Bmobile	Houses With Phones	Houses With Radios	Radio Networks	Comments
		Wana	2,080		Nondugl HC											Road
		Nolkunung	755		Nondugl HC											Road
		Koskan	848		Nondugl HC											Road
21	Bamna		<b>3,650</b>													
		Bamna	271		Nondugl HC											Road
		Gun	836		Nondugl HC											Road
		Gergan	623		Nondugl HC											Road
		Dalnamp	1,007		Nondugl HC											Road
		Nongol Tri	692		Nondugl HC											Road
		Nondugl Wa	93		Nondugl HC											Road
		Nondugl Plnt	127		Nondugl HC											Road
22	Kombulno		<b>5,163</b>													
		Kombulno	477		Nondugl HC											Road
		Parmel	838		Nondugl HC											Road
		Maninge	738		Nondugl HC											Road
		Konmal	848		Nondugl HC											Road
		Mamne	464		Nondugl HC											Road
		Aipal	213		Nondugl HC											Road
		Jumul	655		Nondugl HC											Road
		Nolbupal	631		Nondugl HC											Road
		Nondugl Station	276		Nondugl HC											Road
		Street marys/p/School	22		Nondugl HC											Road
23	Kumbal		<b>4,398</b>	<b>6,249</b>		<b>7,495</b>	<b>1,350</b>	<b>3,454</b>		<b>16</b>	<b>16</b>	<b>13</b>	<b>746</b>	<b>74</b>		<b>Road</b>
		Kumbal 1	237	307	Nondugl HC											Not a Village its the ward
		Gerkan	337	447	Nondugl HC	572	100	254	01.08.23	1	1	1	82	16	NBC & FM	Road
		Korowaula	293	472	Nondugl HC	597	100	281	31.07.23	1	1	1	15	3	NBC & FM	Road
		Bunden	269	498	Nondugl HC	572	100	269	31.07.23	1	1	0	40	2	NBC & FM	Road
		Minude	132	302	Nondugl HC	711	100	323	01.08.23	1	1	1	93	11	NBC & FM	Road
		Miamile	78	288	Nondugl HC	313	50	142	02.08.23	1	1	1	16	1	NBC & FM	Road
		Yoganemul	188	284	Nondugl HC	411	49	185	02.08.23	1	1	1	49	1	NBC & FM	Road
		Kumbal 2	230	264	Nondugl HC											Not a Village its the ward
		Balgawa	164	303	Nondugl HC	397	81	192	06.08.23	1	1	1	41	0	NBC & FM	Road
		Palau	323	302	Nondugl HC	489	100	236	06.08.23	1	1	1	73	1	NBC & FM	Road
		Yokong Kombu	352	118	Nondugl HC	238	47	109	06.08.23	1	1	1	25	2	NBC & FM	Road
		Genakane	215	284	Nondugl HC	269	50	124	06.08.23	1	1	1	49	0	NBC & FM	Road
		Wambur	523	302	Nondugl HC	367	100	175	06.08.23	1	1	0	31	1	NBC & FM	Road
		Gui	284	78	Nondugl HC	233	44	113	06.08.23	1	1	0	22	21	NBC & FM	Road
		Yambuna	274	182	Nondugl HC	206	50	96	06.08.23	1	1	1	31	14	NBC & FM	Road
		Elu	335	875	Nondugl HC	914	181	424	06.08.23	1	1	1	58	1	NBC & FM	Road
		Munumul(Kumbal)		286	Nondugl HC	266	50	123	02.08.23	1	1	1	43	0	NBC & FM	Road
		Niglgogl	164	657	Nondugl HC	940	148	408	01.08.23	1	1	1	78	0	NBC & FM	Road
24	Domil		<b>5,476</b>	<b>6,778</b>		<b>5,566</b>	<b>1,031</b>	<b>2,669</b>		<b>11</b>	<b>6</b>	<b>12</b>	<b>763</b>	<b>0</b>		
		Domil	765	657	Dona SHC					1					FM	Included Under Domil Ep
		Domil Ep	682	1,182	Dona SHC	1,451	281	699	01.08.23	1	1	2	222	0	FM	Road
		Domil Mi	418	455	Dona SHC	984	214	473	01.08.23	1	1	2	133	0	FM	Road
		Damar	518	98	Dona SHC					1						Included Under Domil Ep
		Arnge	579	953	Dona SHC	1,047	193	509	03.08.23	1	1	2	152	0	FM	Road
		Karepa	880	868	Dona SHC	558	98	260	31.07.23	1	1	2	56	0	FM	Road
		Urup 1	567	322	Dona SHC	603	97	291	31.07.23	1	1	2	80	0	FM	Road
		Nukem	557	1,252	Dona SHC					1						Included Under Karepa Com. Schl
		Eselkul	108	236	Dona SHC					1						Included Under Urup1
		Kauns	301	272	Dona SHC					1						Included Under Karepa Com. Schl
		Kumbal Check Point		272	Dona SHC											Same as Munumu
		Karepa Community School	100	211	Dona SHC	923	148	437	31.07.23	1	1	2	120	0	FM	Road
25	Kapalku		<b>4,987</b>	<b>4,756</b>		<b>4,136</b>	<b>1,022</b>	<b>2,067</b>		<b>11</b>	<b>11</b>	<b>22</b>	<b>584</b>	<b>0</b>		
		Kapalku	694	573	Dona SHC	449	100	210	04.08.23	1	1	2	72	0	FM	Road
		Kumbal	59	279	Dona SHC	336	95	177	02.08.23	1	1	2	67	0	FM	Road
		Dona	892	1,245	Dona SHC	858	235	447	05-08.08.23	1	1	2	135	0	FM	Road
		Kupand	335	534	Dona SHC	331	50	150	03.08.23	1	1	2	6	0	FM	Road
		Kulka	335	198	Dona SHC	161	47	79	03.08.23	1	1	2	44	0	FM	Road
		Dona Las	386	406	Dona SHC	445	97	213	04.08.23	1	1	2	62	0	FM	Road
		Kopong	257	254	Dona SHC	217	50	109	02.08.23	1	1	2	39	0	FM	Road
		Donu	447	39	Dona SHC	195	50	98	03.08.23	1	1	2	15	0	FM	Road
		Tolpa	1,007	845	Dona SHC	644	200	339	06.08.23	1	1	2	103	0	FM	Road
		Wagi Dande	506	196	Dona SHC	257	48	119	04.08.23	1	1	2	5	0	FM	Road
		Dona Primary School	68	188	Dona SHC	243	50	126	07.08.23	1	1	2	36	0	FM	Road
26	Banz Urban		<b>3,056</b>	<b>5,654</b>		<b>2,409</b>	<b>370</b>	<b>1,113</b>		<b>4</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>90</b>		
		Commercial Area	1,146	2,192	Banz2 HC	1,975	281	901	13.08.23	1	1	1		90	NBC	Road
		Catholic Mission	748	1,164	Banz2 HC					1						Under Commercial area
		Wara - Tombul	337	568	Banz2 HC					1						Covered under Block Two
		Kudjip - Banz Roadside	824	1,730	Banz2 HC	434	89	212	13.08.23	1	1	1			NBC	Road