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Post-Distribution Monitoring (PDM)
at [August to November]-months
[19 August – 2 November, 2019]

FIRST PDM REPORT

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1 EXECUTIVE SUMMARY

Description of: project objectives, number of households visited (representing #% of total households in the district / region), start and end date, hang-up rate was #%, coverage %, budgeted cost, actual cost, actual cost per HH visited

The purpose of the household level PDM was to evaluate the outcomes of the Malawi 2018 Long Lasting Insecticides Net (LLINs) distribution campaign in Southern & Central Regions for AMF funded LLINs with particular emphasis on the level of net coverage and usage. Specifically, the household level survey was to (a) to measure the coverage, usage and condition of universal LLINs in districts (b) to educate and encourage communities to use the nets (c) to collect information that can be used to inform malaria prevention strategies in Malawi. Malawi Red Cross Society (MRCS) was contracted to do a Post Distribution Monitoring (PDM) exercise in 11 districts at 9 months scheduled interval. For 100% main data collection total of 22918 households (HHs) in the 11 districts were visited against a target of 28 888HHs representing 79%. For the revisit survey a total of 1151 HHs were revisited out of 1524 targeted households in all the 11 districts representing 76%. The PDM survey was usually done for 6 days in each district and this first PDM (at 9months) data collection took place from 19th August to 2nd November, 2019 for all the 11 districts. Data analysis and final reporting was finished in December, 2019. The average hang-up rate for the main data collection (100%) for the 11 districts was 64%. The survey results revealed that from the nets households received, 93% were Perma Nets while the other 7% belonged to other categories, mainly Olyset nets. This was the case because in some districts, nets for AMF and Global Fund were mixed before the distribution.

Total expenditure was **91,377.00 USD** including admin fee and equipment purchases such as phones, laptops, etc. Total number of households visited including revisit surveys were 24,069 giving 2.15 USD as the average cost per household visited and 0.90 USD per net surveyed.

2 RESULTS

A total of # households and # nets were surveyed.

- A total of 22 918households (main data collection) were surveyed in the Central and Southern regions of Malawi against a target of 28 888 households representing (79.3%) at 1.5% of total households which received Mosquito Nets in the 2 regions. For the revisit survey a total of 1151

households were revisited out of 1524 targeted households representing 75.5%. However, it should be noted that some households were visited but not interviewed because they were temporarily or permanently out of the community during the time of the survey while others denied consent.

- From the 22 918 visited households, 5520 nets were surveyed and viewed 93% were Perma-nets and 7% were from other categories more especially Olyset.

2.1 Hang up rate / Coverage

Table 1: Output from DES analysis screens

| | Main data | Revisit data | |
|-----------------|---------------------|---------------------|--|
| District | Hang up rate | Hang up % | |
| Dowa | 67% | 71% | |
| Mangochi | 82% | 45% | |
| Ntcheu | 54% | 68% | |
| Thyolo | 80% | 76% | |
| Phalombe | 59% | 66% | |
| Mulanje | 58% | 54% | |
| Balaka | 47% | 47% | |
| Dedza | 54% | 54% | |
| Chiradzulu | 72% | 71% | |
| Chikwawa | 63% | 63% | |
| Kasungu | 67% | 73% | |
| Average | 64% | 63% | |

The PDM survey results in the figure above reveals an average hang up rate of 64% and 63% for main data and revisit data respectively. Hang up is lower than expected at 68% in most of the districts for following reasons;

- ✓ The majority of the respondents indicated that during the time of the survey (summer) there are few mosquitoes in most districts. They have more mosquitoes during the rainy season when they hang up the nets.
- ✓ It was also observed that bedbugs usually hide in the corners of the mosquito nets as well as in the spaces where hanging tools (nails) are placed. Most people believed that the mosquitoes bring bedbugs, hence no use of the nets (for instance there were more bedbugs in Balaka district during the survey period)
- ✓ Lack of sleeping space in many homes. For instance, many people sleep in the sitting room and everyday nets have to be un-hanged to create

space. This seems to be boring and makes people just stop hanging the nets.

- ✓ Other respondents indicated that it is hot sleeping in a mosquito net

The high percentage of hang up rate of nets for Mangochi district could be as a result of the district being close to the lake and there are usually more mosquitoes in districts close to the water bodies.

2.2 Net Presence

Table 2: Output from DES analysis screens

| Status of net | Districts | | | | | | | | | | | Average |
|--------------------------|-----------|------------|---------|---------|------------|-----------|---------|--------|--------------|------------|-----------|------------|
| | Do wa | Ma ngo chi | Ntc heu | Thy olo | Phal om be | Mul anj e | Bal aka | Ded za | Chir adz ulu | Chik wa wa | Kas un gu | |
| Hangin g | 67% | 82% | 54% | 80% | 59% | 58% | 47% | 54% | 71% | 63% | 74% | 64% |
| Not hangin g but present | 26% | 10% | 30% | 16% | 35% | 33% | 36% | 35% | 18% | 18% | 15% | 25% |
| Not Present | 5% | 3% | 13% | 3% | 4% | 7% | 12% | 8% | 9% | 6% | 5% | 7% |
| Not present: worn out | 2% | 5% | 3% | 1% | 2% | 2% | 5% | 3% | 2% | 13% | 6% | 4% |

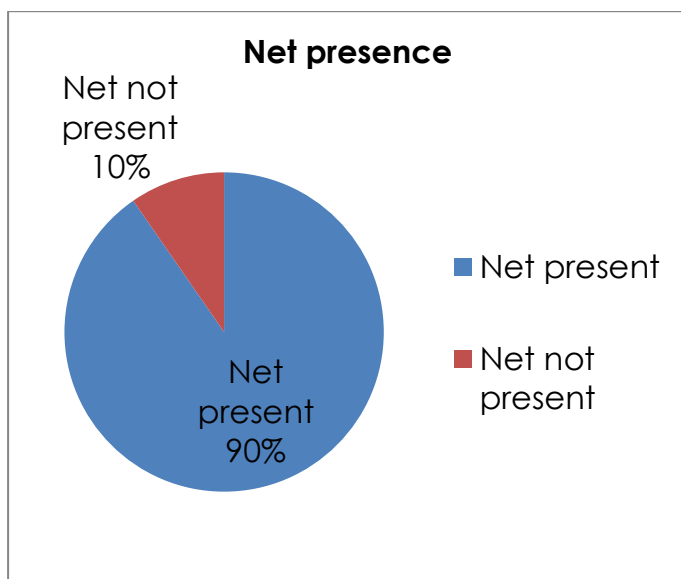


Figure 1: Net availability in the house

The figures above indicate that an average of 90% of the distributed nets are still present (hanging or not hanging but present) in the respondent's homes while 11% are either not present or worn out.

Below are bullet highlights as to why some nets are not present.

- ✓ Some nets have been given to family members. Most of the nets which were not present are under this category. Some nets have been given to relatives who did not receive nets and others who are away from the household. For instance, some family members got married and were shared nets; others carried the nets to school and among other reasons.
- ✓ Other nets have been saved for future use because households already had some nets before the time of universal net distribution
- ✓ Some nets have been stolen
- ✓ Damaged
- ✓ Sold
- ✓ Lack of Hanging tools
- ✓ Unwilling to use
- ✓ Others believe that a net can catch fire
- ✓ Net can be hot
- ✓ Others believe that sleeping under nets reduces sexual power

2.3 Net Condition

Table 3: Output from DES analysis screens

100% Data Collection

| | Districts | | | | | | | | | | | |
|------------------|-----------|----------|----------|--------|---------|---------|--------|--------|------------|----------|---------|------------|
| Condition of Net | Dowa | Mangochi | Ntchoulo | Thyolo | Phalome | Mulanje | Balaka | Dezaza | Chiradzulu | Chikwawa | Kasungu | Average |
| Very Good | 88% | 60% | 68% | 78% | 76% | 65% | 71% | 70% | 74% | 52% | 42% | 68% |
| Good | 9% | 20% | 26% | 15% | 18% | 27% | 20% | 19% | 21% | 31% | 51% | 23% |
| Just ok | 3% | 20% | 6% | 7% | 6% | 8% | 9% | 11% | 5% | 17% | 7% | 9% |

The figure above indicates that a large percentage of the nets are still in good condition (very good = 68% and good = 23%).

In Chikwawa nets appearing to be in worst condition because of the following reasons;

- ✓ Due to high temperatures in the summer especially in the Lower Shire regions like Chikwawa nets are being used as blankets hence easily torn out
- ✓ In some cases nets are used as mats due to unavailability of sleeping mats. Because of poverty many households cannot manage to buy sleeping mats
- ✓ Some households received more nets than required due to double registration in polygamous homes hence not much care is given the nets

While in Kasungu there was high multiplication of bed bugs and when the people kill the bedbugs' ends up destroying the nets resulting into a reduction in the number of nets which are in good condition.

2.4 Data Quality Results

Output from DES, looking at the 5% revisit data and the 6% second entered data and assessment of performance on both.

This section tries to check on the data quality on data which was collected under the 100% main data collection. Specifically, checks have been done on nets presence (status of nets) and condition at both 100% and 5% data revisit.

Net Status for 100% Data Collection

NOTE: Net Not Present includes nets which were not available in the house at the time of the survey and that the nets were either given to other family members or used for other purposes. Nets not present worn out are a group of nets which were used by the same holds but have been worn out after long or poor usage.

Table 4: Status of the net at 100% data collection

| Status of net | Districts | | | | | | | | | | | Average |
|--------------------------|-----------|------------|---------|---------|------------|-----------|---------|--------|--------------|------------|-----------|------------|
| | Do wa | Ma ngo chi | Ntc heu | Thy olo | Phal om be | Mul anj e | Bal aka | Ded za | Chir adz ulu | Chik wa wa | Kas ung u | |
| Hangin g | 67% | 82% | 54% | 80% | 59% | 58% | 47% | 54% | 72% | 67% | 67% | 64% |
| Not hangin g but present | 26% | 10% | 30% | 16% | 35% | 33% | 36% | 35% | 23% | 21% | 22% | 26% |
| Not Present | 5% | 3% | 13% | 3% | 4% | 7% | 12% | 8% | 3% | 8% | 9% | 7% |
| Not present: worn out | 2% | 5% | 3% | 1% | 2% | 2% | 5% | 3% | 2% | 4% | 2% | 3% |

Net Status for Revisit Data (at 5%)

Table 5: Status of the net at 5% data collection

| | Districts | | | | | | | | | | | |
|-------------------------|-----------|------------|---------|---------|------------|-----------|---------|--------|--------------|------------|----------|------------|
| Status of net | Do wa | Ma ngo chi | Ntc heu | Thy olo | Phal om be | Mul anj e | Bal aka | Ded za | Chir adz ulu | Chik wa wa | Kasu ngu | Average |
| Hanging | 71% | 81% | 69% | 76% | 65% | 52% | 47% | 54% | 71% | 63% | 74% | 66% |
| Not hanging but present | 21% | 7% | 20% | 21% | 32% | 36% | 36% | 38% | 18% | 18% | 15% | 24% |
| Not Present | 6% | 4% | 8% | 2% | 3% | 7% | 12% | 6% | 9% | 6% | 5% | 6% |
| Not present : worn out | 2% | 8% | 3% | 1% | 0% | 5% | 5% | 2% | 2% | 13% | 6% | 4% |

Net condition for 100% Data Collection

Table 6: Condition of the net at 100% data collection

| | Districts | | | | | | | | | | | |
|------------------|-----------|------------|---------|---------|------------|----------|---------|--------|--------------|------------|----------|------------|
| Condition of Net | Do wa | Man goc hi | Ntch eu | Thyo lo | Phal omb e | Mul anje | Bala ka | De dza | Chir adz ulu | Chik wa wa | Kasu ngu | Average |
| Very Good | 88% | 60% | 68% | 78% | 76% | 65% | 71% | 70% | 91% | 51% | 42% | 69% |
| Good | 9% | 20% | 26% | 15% | 18% | 27% | 20% | 19% | 8% | 35% | 51% | 23% |
| Just ok | 3% | 20% | 6% | 7% | 6% | 8% | 9% | 11% | 1% | 14% | 7% | 8% |

Net condition for Revisit Data (at 5%)

Table 7: Condition of the net at 100% data collection

| Condi on of Net | Districts | | | | | | | | | | | Aver age |
|-----------------------|-----------|--------------|------------|------------|------------------|-------------|------------|-----------|----------------|--------------|-------------|-------------|
| | Dow a | Mang ochi | Ntch eu | Thy olo | Phal om be | Mul anje | Bala ka | Dedz a | Chira dzulu | Chikw awa | Kasu ngu | |
| Very Good | 95% | 57% | 66% | 81% | 89% | 61% | 81% | 74% | 91% | 51% | 35% | 71% |
| Good | 5% | 20% | 30% | 15% | 10% | 33% | 15% | 23% | 8% | 35% | 63% | 23% |
| Just ok | 0% | 23% | 4% | 4% | 1% | 6% | 4% | 3% | 1% | 14% | 2% | 6% |

The tables above (at 100% and 5% revisit data) on Net presence and Net Condition do not show many differences in the 2 data sets. This shows that the data was accurately collected.

3 OPERATIONS

Training

Description of: how training was carried out for supervisors, how training was carried out for data collectors

The training of the data collectors was almost uniform in all the 11 districts. Firstly, training of MRCS supervisors and those from National Malaria Control Program was done at MRCS headquarters before the commencement of the district data collection. The supervisors were oriented on the scope of the PDM exercise, objectives and how MRCS operates in the districts. The supervisors were then trained in Open Data Kit (ODK) tool which was used for data collection by the data collectors. The National level trained supervisors would support the training of the district supervisors and data collectors in the district. Each district was assigned 6 days for the PDM survey and the first day was for the training of data collectors.

At district level, the exercise started with an orientation of the district supervisors on the whole exercise. Specifically, the district supervisors were briefed on the scope of the PDM exercise, objectives, purpose, ODK data collection tool, spot checks and use of the spares by the data collectors. The briefing for the district supervisors was done on the first day before training of the data collectors. It should be noted that data collectors were selected well in advance by the district supervisors.

The data collectors were trained on ODK data collection tool. Data collectors were trained on how to use the ODK tool for data collection and all data collectors had a look at the questionnaire and all the questions were reviewed together with the data collectors, to ensure that everyone was aware of what was expected of each question. After the training the data collectors were paired to pretest the questionnaire before commencing the field work. One data collector took the role of an interviewer and the other one as a household head(interviewee) and vice versa. Therefore, each data collector had a feel of the questionnaire and flow of questions before starting the actual work in the field. The training was done for one day. District supervisors also attended the training together with the data collectors.

Data collection

Description of: how many people worked on the PDM, average number of households per data collector per day, communication to local leaders before the PDM (if any), management of spares, how data collector gathered information (steps taken), how supervision was performed (spot checks, frequency of data quality checks), how travel was managed.

The number of data collectors in each district was determined by the sample size for each district and the ability of the data collectors to accomplish the data collection within 5 days (4 days for main data and 1 day for revisit). After the training, the next 4 days were for main data collection. However, due to the complexity of the work, some household for main data were finalized on the 6th day during the revisit. But this was only possible for households were not on the revisit list. The table below shows the total number of people who worked on the PDM survey and the average number of households per data collector per day:

Table 8: Number of data collectors and households visited

| <i>District</i> | # of Data Collectors | | # of households per data collector per day | |
|------------------------|-----------------------------|-----------------------|---|-----------------------|
| | <i>Main data</i> | <i>Revisit</i> | <i>Main data</i> | <i>Revisit</i> |
| Dowa | 32 | 13 | 20 | 11 |
| Mangochi | 47 | 36 | 15 | 4 |
| Ntcheu | 27 | 11 | 21 | 11 |
| Thyolo | 33 | 12 | 17 | 11 |
| Phalombe | 20 | 10 | 21 | 9 |
| Mulanje | 24 | 10 | 20 | 9 |
| Balaka | 16 | 7 | 21 | 9 |
| Dedza | 36 | 14 | 20 | 10 |
| Chiradzulu | 17 | 7 | 19 | 9 |
| Chikwawa | 29 | 12 | 13 | 7 |
| Kasungu | 36 | 14 | 17 | 6 |
| | Average | | 19 | 9 |

The table above shows that for the main data collection each data collector managed to collect an average of 19 households per day and 9 households per data collector per day for the revisit survey. The differences in the number households visited per day in the various districts is attributed to another of factors such topography of the district, settlement patterns and among others as highlighted below under sections of what went on well and what did not go well

On average, each district was assigned 1 national level supervisor supported by 2 district level supervisors to spearhead the data collection exercise. It should be noted that no initial communication was done to local leaders before the PDM to avoid staging. On each day each data collector was assigned a village to visit with a list of 23 sampled households. The data collectors were given a printed paper with a list of HHs to be visited. The list was to guide the data collectors by ticking on the households visited to avoid repeating the same households. These papers were collected by the supervisors at the end of each day.

The data collectors were dropped at the village head and the data collector would explain the purpose and procedure of the PDM to the village head. The village head identified from the list of the sampled HH names, those households which exist in the village/community. The data collector was assigned a community guide by the village head that supported the data collector in easy identification of households (door to door). Firstly, the data collector had to explain the purpose of the exercise to the owner of the house and always had to seek consent from the interviewee before beginning the survey. The household head had to accept to participate in answering all the questions and allow the data collector to enter the house to view the mosquito nets. If the data collector was denied consent then the interview could not

commence and the data collector would visit the other household on the list. If a sampled HH was temporarily out of the community, the data collector had to make 2 separate visits and if still could not find the sampled HH, then he/she would ask for a spare household from the supervisors. Each sampled village had 7 spare households to be used in case the household from the main list was not available in the community. The supervisors would regularly conduct spot checks on how the data collectors were collecting the data and also addressing any challenges which were encountered by the data collectors in the field in order to ensure data quality. Each vehicle was assigned a team leader to assist the supervisors in times of need. In addition, the supervisors also supported data collection in some villages. The main data collection (100%) was done for 4 days and the 5th day was for the revisit survey. It should be noted that. It should be noted that for PDMs in Thyolo, Mulanje and Phalombe, MRCS hired vehicles from suppliers at national level. However, this one proved to be expensive and for the other districts MRCS management resolved in outsourcing the vehicles from the district hospital and council, and the deficit vehicles were hired from local district suppliers.

Re-visits

Description of: how were-visit process was communicated to data collectors, who conducted re-visits, when these were conducted.

The whole PDM program was communicated on the first day during the training of the data collectors. Revisit data was collected on the 6th day of the exercise after completion of the main data collection. For the revisit survey the selected data collectors were assigned a sampled village from which the data collector did not visit during the main data collection. The number of data collectors were trimmed according to the total number of sampled villages and no data collector would survey a village from which was allocated during the main data collection.

Data management:

For paper-based data collection, description of: management of paper records in the field, transport of records, data entry.

Records of HHs for each sampled village (23 per village) were printed on a sheet paper for each data collector. The paper records were just to guide data collectors on which households have been interviewed by ticking the names. All the papers were then after handed over to the supervisors at the

end of the day. All these paper records were archived by MRCS at the headquarters.

For electronic data collection, description of: software and devices used, number of devices used, management of electronic devices, data transfer and storage.

50 Android Samsung Phones (A10) were procured and used for data collection. Since the activity was done concurrently in some districts, whereby the sample size for the districts was more than 50, extra tablets/ phones were borrowed from MRCS projects to support the activity. The phones were equipped with ODK Collect Version 1.24.1 Software. All the phones were managed by the MRCS national supervisor in terms of charging and data transfer. The phones were handed to the data collectors every morning before going to the field, and were handed over back to the national supervisor after field data collection. The phones were collected on daily basis to avoid mismanagement of the phones by the data collectors. The National supervisor would transfer/sync the data to the ODK server on a daily basis at the end of each day. This was done to avoid losing the already collected data through erasing by the data collectors or tampering of the forms.

3.1 What Went Well

Bullet format fine

As in any other survey there are issues that go on well and challenges during the survey. Below are highlights of what went on well in each district as reported in the AMF DESPDM online reporting tool.

- ✓ Most of the data was collected and submitted to AMF
- ✓ Most of the randomly selected villages were visited and data was collected
- ✓ Data collection tools/materials were provided and explained well in training
- ✓ Household members were available and willing to provide information
- ✓ Data collectors turned up as scheduled for training and data collection
- ✓ Most of the randomly selected RE-VISIT households were visited and data was collected
- ✓ Data Collectors used the data collection tools well
- ✓ The budgeted time for data collection was adequate

- ✓ Use of nets was checked, and households were using nets correctly
- ✓ Training was well organized
- ✓ Data collectors turned up as scheduled for training and data collection
- ✓ Use of nets was checked, and households were using nets correctly
- ✓ There is political support for PDMs
- ✓ The data collectors were dedicated in collecting data despite that they were not satisfied with the daily wage of allowance of MK6000.00
- ✓ Proper support from the district team makes the work easier.
- ✓

3.2 What Didn't Go Well

Bullet format fine

- ✓ Some selected villages could not be found
- ✓ Payment (either wage or transport allowance) was not enough and data collectors were not satisfied with it (wage of 8.2 USD per day)
- ✓ Some households on the list could not be found in the stated community
- ✓ Houses were far apart from each other which made enumerators travel long distances as a result time was wasted and they ended up knocking off at odd hours.
- ✓ Many households had migrated
- ✓ Nets were found to be in poor condition
- ✓ Transport to and from some areas was difficult
- ✓ Unfavorable weather conditions/cultural ceremonies/farming affected data collection in some districts
- ✓ Overtime claims by the enumerators because of late knocking off
- ✓ In some cases, villages could not be reached as they required to cross rivers/streams on canoes which was expensive to pay for it and not budgeted for
- ✓ Some Households members were unavailable or unwilling to provide information
- ✓ Topography affected in visiting some villages- some areas are very mountainous
- ✓ Finishing the work over the weekend affected activity planning. Some enumerators were engaged with other activities over the weekend so had to drop out and new data collectors had to be trained again.
- ✓ Some villages were not found in the right health facility, hence affected our planning and fuel consumption
- ✓ Most of the villages are very far apart and sparsely distributed, which makes it difficult to reach the target of 23 HHs per day

3.3 Lessons Learned

Bullet format fine

Dowa

- ✓ The data should be analyzed and feedback should be more widely disseminated
- ✓ Planning and logistics should be improved (e.g. weather gear, airtime)
- ✓ Wages for data collectors and/or supervisors should be increased
- ✓ Sensitization on net use should be done during data collection
- ✓ The number of spare households should be increased
- ✓ The transport allowance for data collectors should be budgeted for
- ✓ The data collection days should be increased
- ✓ The list of selected households to be visited should be sent to the district team well in advance for prior planning on how best to allocate the households to be visited together per day. some villages are very isolated and far from the rest
- ✓ There is need to do more awareness on hang up and net usage awareness. Most of the nets are available in the households
- ✓ Behavior change awareness is needed because more families believe that sleeping under mosquito nets reduces sexual man power
- ✓ Enumerators should be provided with visibility materials (e.g. identity cards and t-shirts or bibs) so that they are easily recognized and accepted by the communities.
- ✓ The villages should be organized into their correct sub-district

3.4 Schedule

Description of: Data collection dates, data entry dates

Data collection and analysis was done during a period of 4 months from August to November, 2019. Specifically, below are the dates for data collection in each respective district. No data entry was needed because the data was synced to the server directly each day after field work.

Mulanje, Thyolo and Phalombe

✓ 19-24 august 2019

Balaka, Chikwawa and Chiradzulu

✓ 3-8 October, 2019

Mangochi and Ntcheu

✓ 21-26 October, 2019

Kasungu, Dedza and Dowa

✓ 28 October to 2 November, 2019

4 FINANCIAL INFORMATION

Description of: budgeted cost, actual cost, reasons for difference, cost per household entered, cost per net distributed;

The figure below indicates the budgeted costs, actual costs and differences for each district.

Table 9: Budget versus expenditure

| District | Budget (USD) | Expenditure (USD) | Balance (USD) |
|-----------------|---------------------|--------------------------|----------------------|
| Dowa | 6,243.85 | 5,233.73 | 1,010.12 |
| Mangochi | 8,230.87 | 8,105.74 | 125.14 |
| Ntcheu | 5,502.73 | 3,962.38 | 1,540.35 |
| Thyolo | 7,647.99 | 6,062.29 | 1,585.70 |
| Phalombe | 3,165.34 | 3,907.62 | (742.28) |
| Mulanje | 3,550.06 | 4,468.85 | (918.79) |
| Balaka | 2,768.87 | 2,097.68 | 671.19 |
| Dedza | 6,809.43 | 4,615.98 | 2,193.44 |
| Chiradzulu | 4,442.37 | 3,513.44 | 928.92 |
| Chikwawa | 4,199.96 | 3,811.23 | 388.74 |
| Kasungu | 6,702.19 | 6,074.39 | 627.80 |
| | 59,263.66 | 51,853.32 | 7,410.34 |

NOTE: The district expenditures excludes equipment purchase and admin fees

A total budget of **59 263.66 USD** was allocated for the exercise in the 11 districts and actual expenditure was **51 853.32 USD**, leaving a balance of **USD 7 410.34** as shown in the figure above. The balance is coming in because some vehicles which were used during the survey were not hired on the budgeted cost but rather outsourced from district partners since hiring of vehicles proved to consume much of the budget for the PDM. The total expenditure including equipment purchases, car hire and admin fees was **91,377.00 USD**

Table 10: Average expenditure of per household

| District | Expenditure (USD) | HHs visited | Total Nets surveyed | Cost per HH visited (USD) | Cost per Net surveyed (USD) |
|--------------|-------------------|------------------|---------------------|---------------------------|-----------------------------|
| Dowa | 5,233.73 | 2687 | 6255 | 1.95 | 0.84 |
| Mangochi | 8,105.74 | 2940 | 7319 | 2.76 | 1.11 |
| Ntcheu | 3,962.38 | 2395 | 5473 | 1.65 | 0.72 |
| Thyolo | 6,062.29 | 2440 | 5984 | 2.48 | 1.01 |
| Phalombe | 3,907.62 | 1780 | 4512 | 2.20 | 0.87 |
| Mulanje | 4,468.85 | 2027 | 5042 | 2.20 | 0.89 |
| Balaka | 2,097.68 | 1392 | 3494 | 1.51 | 0.60 |
| Dedza | 4,615.98 | 2970 | 7094 | 1.55 | 0.65 |
| Chiradzulu | 3,513.44 | 1352 | 3163 | 2.60 | 1.11 |
| Chikwawa | 3,811.23 | 1576 | 3674 | 2.42 | 1.04 |
| Kasungu | 6,074.39 | 2510 | 5712 | 2.42 | 1.06 |
| Total | 51,853.32 | 24,069.00 | 57,722.00 | 2.15 | 0.90 |

NOTE: The district expenditures excludes equipment purchase and admin fees

The table above shows an average expenditure of 2.15 USD per household visited and 0.90 USD per net surveyed. It should be noted that these costs also imply to households which were visited but households' owners were not available during the time of the survey and also includes costs for other nets that were hanging in the home that were not distributed during the 2018 universal coverage campaign. All these nets were surveyed.

It should be noted that the high cost for Thyolo, Chikwawa and Mangochi districts is as a result of long distances between HHs of the sampled villages. Additionally, for Mangochi most of the sampled villages (HHs) are very far from the central business which logistically required more fuel consumption.

In the case of high cost for Chiradzulu district: Logistical costs such as allowances for national level supervisors and fuel for travelling to and from the Balaka, Chiradzulu and Chikwawa districts was derived from the Chiradzulu budget.

5 ACTIONS BASED ON DATA& EXPERIENCE

5.1 Actions to improve malaria prevention

Description of: actions suggested given the results and findings of the PDM, either to be taken immediately (by any actor) or to improve the next campaign

- ✓ There is need for more awareness campaign on hang up of nets. A large percentage of the communities are not able to hang up their nets. Key among the reasons is that HHs thinks that mosquito nets bring bedbugs in the house. There is need for more altitude change trainings among households. Some nets have sold and used for other purpose such as gardening and used as ropes for packaging charcoal, hence more awareness is needed on the same.
- ✓ DHO needs to take urgent action in disinfecting the nets for bed bugs in most communities. There will be more cases of Malaria since people are not using the nets as a result of the outbreak of the bed bugs and

5.2 Actions to improve PDMs

Description of: actions that could be taken (by the partner or by AMF) to improve the implementation of PDMs, in the next round or in other countries

- ✓ Nets from different partners should be distributed and recorded separately. It was found out that some HHs which were registered to have received Perma nets actually received different types of nets
- ✓ Partners or AMF should put more emphasis on hang up campaign. During seasons of few/no mosquitoes in the homes; nets should be kept safely for futures use. Results can reveal that nets are misused during these times of the year.
- ✓ There is need to map the areas well in advance or /coordinate with the district in identifying the villages to avoid wasting time in searching for villages (during the survey period) which are very far and not reachable
- ✓ The households need periodic monitoring to encourage the households to use the nets