A RAPID ASSESSMENT FOR MALARIA INVESTMENTS IN MOROGORO AND COAST REGIONS IN TANZANIA

A Study Report By
Tanzania National Malaria Movement (TANAM)

March 2017
A RAPID ASSESSMENT FOR MALARIA INVESTMENTS IN MOROGORO AND COAST REGIONS IN TANZANIA

A STUDY REPORT
By
Tanzania National Malaria Movement (TANAM)

March 2017
## Contents

Abbreviations and Acronyms .................................................. 5  

Executive Summary ........................................................... 7  

1.0 Introduction  ............................................................... 9  
  1.1 Tanzania contextual analysis ........................................... 9  
  1.2 Malaria situation in Tanzania Mainland: ......................... 11  
  1.3 Malaria epidemiology .................................................... 11  
  1.4 Health system organization ............................................ 11  
  1.5 Achievement in malaria control in Tanzania .................... 11  
  1.6 Objectives of the assessment .......................................... 12  

2.0 Methodology ..................................................................... 13  

3.0 Population Sample and Sampling Techniques .................... 15  
  3.0 Data collection methods ................................................ 15  
  3.1 Quality assurance ........................................................ 16  
  3.2 Limitations ................................................................. 16  
  3.3 Results: ..................................................................... 16  
  3.4 Findings .................................................................. 17  
  3.5 NGO’s involved in malaria ............................................. 24  
  3.6 Key Findings - Discussion ............................................. 24  
  3.7 Conclusion .................................................................. 24  
  3.8 Recommendations ...................................................... 25  

Appendixes ............................................................................ 27
Abbreviations and Acronyms

AMO  Assistant Medical Officer
BRN  Big Results Now
CCA  Community Change Agent
DMFP  District Malaria Focal Person
DMO  District Medical Officer
DNO  District Nursing Officer
HMIS  Health Management Information System
TFDA  Tanzania Food and Drug Authority
MRDT  Malaria Rapid Diagnostic Test
NMCP  National Malaria Control Program
ACT  Artemisinin-based combination therapy
ADDO  Accredited drug dispensing outlet
AL  Artemether-lumefantrine
ANC  Antenatal care
ASAQ  Artesunate-amodiaquine
BCC  Behavior change communication
MSD  Medical Stores Department
PDPA  Pwani Development Promotion Agency
PHSDP  Primary Health Services Development Programme
PMO’s  Prime Minister’s Office
PPP  Public Private Partnership
TANAM  Tanzania National Malaria Movement
TCDC  Tanzania Communication and Development Centre
TPHC  Tanzania Population and Housing Census
DC  District Councils:
PSI  Population Services International
Currently malaria prevalence to less than 5 years is 14% as reported TDHS –MIS 2015/2016. Over 80% of the population has knowledge on malaria causes, signs and symptoms (TDHS-2015/16). Evidence suggests that reduction of malaria prevalence has substantial reduction of neonatal and maternal morbidity and mortality. The 2015/16 TDHS-MIS reports that in the past 15 years, childhood mortality has declined from 1990’s. Infant Mortality Rate (IMR) has declined from 99 deaths per 1000 live births 1999 to 43 deaths TDHS-MIS 2015/16. There was Neonatal Mortality Rate from 40 deaths to 25 deaths per 1000 as per TDHS-MIS 2015/16 in contrast to Maternal Mortality Rate which has risen from 432 deaths per 100,000 live births. Population Census, 2012 to 556 deaths per 100,000 live births TDHS2015/16-MIS.

The National Government Health Budget does not specify the malaria investment but rather stipulated as health sector budget. Disease specific budgets are planned at program level. According to Tanzania Malaria Operational Plan 11 (2014-2016), the larger part of the malaria investments in Tanzania depend on donor support. A total of USD 171,900,000 was contributed to specific malaria activities by donors including; GF-46%, PMI-26%, DFID-21%, Swiss Agency-3% while others contributed 2%.

This study revealed Local resources for Malaria Investment amounted Tsh.76, 026,000 for financial years 2013/2014, 2014/2015, 2015/2016 and 2016/2017. District council’s commitment in Morogoro Urban was achieved at approximately 75% of the total budget allocation while Morogoro rural 100% and Coast Region (Pwani) Regional Office 21%. Further Non Budget local resources from National Health Fund, Community Health Fund ,user fee and others is estimated to have the potential of raising Tsh52.4 billion annually.

In view of the Health sector Reform Policy and the Health Sector Strategic Plan 1V (HSSP) (2015-2020), Local Government Authorities (LGA’s) and the district administrations have direct mandate on resource allocation and implementation from their revenue collections while the Regional Administrators are assigned with coordination, supervision and monitoring roles. The region lacks the power for resource allocation and implementation as they are centrally guided. Findings from this assessment have indicated inadequate community involvement and participation in malaria control hence leading to the implementation of the Malaria strategy by 2030.

In general, the assessment has been able to examine malaria investment in National and local levels, which are more, financed by the Government and malaria Partners in relation to country strategic plans. Great achievements have been made. However evidence revealed that the investment trend is declining fast and there is no Country Malaria Sustainability Strategy (CMSS)
to guide the malaria elimination investment process. If the Country is to achieve the Malaria elimination by 2030 and sustain the achievements there is a need to assemble the long term domestic investments especially those that are offering life-saving goods and services like the LLINs and BTI production and the human resource and use the existing opportunities to invest on local supply of ACT and address other critical health issues. Health system strengthening and especially community based health system where families and communities are effectively engaged and participate fully in the development process that is policy formation, program design, planning and implementation is very important part for achieving the intended goals. The family is the primary actor on health issues and there are potentials for local authorities and other actors through effective multispectral approaches to allocate adequate resources for mitigating malaria with various improved strategic tools in different localities. Evidence showed the need to review policies and improve tools for local resource mobilization especially in areas related to User fee, Community Health Insurance and National Health Insurance.

Last but not least is the need to strengthen the community health networks and develop strong activists as vehicles for reaching the desired destination through effective linkages and coordination of all health actors, promotion of resource mobilization tools and advocacy services.
1.0 Introduction

1.1 Tanzania contextual analysis

The United Republic of Tanzania (URT) is comprised of Tanzania mainland and Zanzibar. Tanzania mainland is divided into 25 Regions with diverse geographical features and climate ranging from tropical, coastal and lowlands. Tanzania is reported to have a Growth Domestic Product (GDP) of 7%. Growth Domestic Product is the monetary value of all the finished goods and services produced within a country’s borders in a specified time period, varying in wealth between urban and rural settings. Population and Housing Census (PHC, 2012) reveals that the total population of Tanzania is 44,928,923 with male population being 21,869,990 and comprising 48.3% of the total population while Female Population is 23,058,933, comprising 51.7% of the total population. On average, the trend shows an increase of 1 million people annually. The average household size in Tanzania remained almost constant between the years 2002 and 2012. It was found to be 4.9 persons per house hold in 2002 and 4.8 in 2012.

Majority of the population dwell in the rural areas, of which 70.4% are women who provide 80% percent of total agricultural labor in a sector which employs about 77% of Tanzanians.

Over 90% of the Tanzania mainland is prone to malaria. The health sector Policy (2015) intend to implement four priorities:

1. Equal distribution of skilled health workers from the lower level of primary health care
2. Improved quality of services
3. Availability of important drugs and health equipment,
4. Strengthening reproductive health of mother and child by reducing at least 60% of mortality rate by the year 2018.

The NMCP strategic plan for 2014-2020 includes the following goals:

1. To reduce malaria morbidity and malaria deaths by 80% from the 2012 levels by 2020
2. To reduce malaria prevalence from 10% in 2012 to 5% in 2016 and to 1% in 2020
3. To increase the proportion of women receiving two or more doses of SP during their Pregnancy from 32% in 2012 to 80% by 2016

To implement the new strategic plan the NMCP will address the thematic areas of:

» Malaria case management
» Integrated malaria vector control
» Supportive interventions, such as BCC and monitoring and evaluation (M&E),
Program management.

Each thematic area has objectives and strategies that support the overarching program goal:

Target Group:
The main target groups are children under the age of five years and pregnant women. There will be proven preventive and therapeutic interventions, including artemisinin-based combination therapies (ACTs), insecticide-treated nets (ITNs), intermittent preventive treatment of pregnant women (IPTp), and indoor residual spraying (IRS). Larviciding

Zanzibar
The ZAMEP’s 2013-2018 Strategic Plan focuses on pre-elimination and its vision that by 2018 Zanzibar will have no locally-acquired malaria cases. The ZAMEP expects to achieve this by providing quality, affordable, and cost effective antimalarial interventions and malaria curative services to all people in Zanzibar and by maintaining and expanding a well-performing epidemic detection and response system. The operational objectives in the ZAMEP Strategic Plan are:

1. To test 100% of suspected malaria cases with a parasitological tests by 2015 and to provide effective antimalarial treatment to all confirmed cases;
2. To add primaquine to the treatment regimen by 2017 to reduce gametocytemia levels in the population and thereby limit transmission;
3. To achieve and maintain 100% coverage with appropriate prevention measures by 2017;
4. To expand malaria surveillance, conduct reactive case detection and investigate 100% of confirmed malaria cases by 2018;
5. To establish functional coordination structures for malaria elimination at national, district and shehia (village) levels by 2018;
6. To conduct relevant operational research to evaluate and optimize ongoing activities and monitor resistance to antimalarial and insecticides

1.2 Malaria situation in Tanzania Mainland:
Currently malaria prevalence to under 5 years is 14% as reported by TDHS-MIS 2015/2016 though remains higher in children of 48-59 months. In line with these there is a reduction of under-5 mortality rate from 147 in 1999 to 67 deaths per 1,000 live births in 2015. The success came about due to the fact that Malaria intervention has gone in line with the revised National Health Policy of 2002 National Strategy for Growth and Reduction of Poverty, Health Strategic Plan (iii) of 2013 and local Government Authority processes (NMSP). Malaria remains a health problem in the country and needs a concerted effort among all players in its prevention and control.

1.3 Malaria epidemiology
Currently Tanzania is on malaria epidemiological transition whereby Malaria prevalence has been decreasing from 30% in 2000 to less than 10% parasitaemia in 2012 as reported in the Tanzania Malaria National Strategic plan of 2014, making 60% of Tanzania population living in hypo-endemic areas, although disease transmission rate remain as high as 95 % for Tanzania mainland whereby in Island malaria epidemiology is less than 1%.

1.4 Health system organization
According to the ministry responsible for health, Tanzania health system is organized in a pluralistic and Decentralized way which shows that in total there are 6,518 health facilities composed of 5607 dispensaries, 684 health centers, and 264 hospitals, both government and private owned, as shown in table 1 below. This number of health facilities implies that about 90% of the population is living within five kilometers from the health facility. This situation ensures that malaria services are accessible to majority of the Tanzanian population.

<table>
<thead>
<tr>
<th>Type of Facility</th>
<th>Public</th>
<th>Parastatal</th>
<th>FBOs</th>
<th>Private</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital</td>
<td>112</td>
<td>9</td>
<td>111</td>
<td>33</td>
<td>264</td>
</tr>
<tr>
<td>Health Center</td>
<td>467</td>
<td>19</td>
<td>139</td>
<td>59</td>
<td>684</td>
</tr>
<tr>
<td>Dispensary</td>
<td>3,990</td>
<td>192</td>
<td>597</td>
<td>790</td>
<td>5,607</td>
</tr>
<tr>
<td>Total</td>
<td>4,569</td>
<td>220</td>
<td>847</td>
<td>882</td>
<td>6,518</td>
</tr>
<tr>
<td>% ownership</td>
<td>70%</td>
<td>3%</td>
<td>14%</td>
<td>13%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: (MOHSW 2013)

1.5 Achievement in malaria control in Tanzania
The information available on malaria prevention and control revealed that Tanzania as a country has been progressing positively in fighting against malaria. For example, malaria operational plan of 2015 indicates that Tanzania has achieved the Insecticide Treated Net (ITN) coverage of greater than 80% and the Reproductive Maternal Neonatal and Child Health (RMNCH), One Plan 11 of 2014 revealed that Malaria trend indicates reduction of child mortality and morbidity.
The Community Change Agent (CCA) is individuals volunteering to assist the community in counseling for health promotion and health behaviors ‘on early treatment seeking. This has resulted in

44,928,923
Total population of Tanzania
more than 80% of the population having knowledge on malaria causes, signs and symptoms (TDHS-2015/16). Further to that the malaria operational plan of 2015 indicates that Social marketing is doing better ADDO shops and retail pharmacy for availing antimalarial in a subsidized price using. This situation more effort and collaborative work relationship among all partners involved in the implementation of malaria initiatives in the country in order to improve the currently malaria trend between low income people.

Tanzania registered a 45% reduction in all-cause under-five mortality from 146/1000 live births in 1999 to 81/1000 live births in 2010

1.6 Objectives of the assessment

The objectives of the local investment in malaria are:

To analyze the alignment of malaria control investments with the policy priorities as provided for in the respective Tanzania National Malaria Control Strategic Plans;

- To analyze the government resource allocation for Malaria Control in the FY 2013/2017 budget estimates;
- To determine the extent to which the budget estimates for Malaria Plans are consistent with country health policy priorities;
- To determine entry point for advocacy by Malaria CSO to various decision makers to increase investment for malaria control and health;
- To share the consultancy results with CSOs through effective communication channels for building capacity and knowledge;

Figure 1: Infant and Under-five Mortality Rates for Five-year Period Nationwide Household Surveys, Tanzania
2.0 Methodology

In this assessment, triangulation methodology was used to obtain data from the respondents based on the objectives provided. Qualitative data collection techniques were designed to collect the targeted audience’s range of behavior and the perceptions that drive them with reference to specific topics or issues.

To accomplish this work, three data collection methods were used to collect data from the respondents which included: Focus group discussions, interviews and observation. Therefore, data was collected using focus group discussion guide, interview guide and observation check list as data collection tools.

Also desk reviews were conducted in line with malaria prevention and control activities in order to complement data collected by the three tools mentioned above. The documents which were reviewed included: Tanzania Population and Housing Census 2012, Tanzania Malaria Strategic Plan (2014-2020), Tanzania Malaria Operational Plan FY (2014, 2015, 2016), Ministry of Health and Social Welfare, The National Road Map Strategic Plan to Improve Reproductive, Maternal, New born, Child and Adolescent Health in Tanzania (2016-2020) One Plan 11(2015), Budget Advocacy Booklet, Tanzania Regional profiles for Morogoro and Coast, Tanzania Demographic Health Survey 2010, Tanzania HIV/AIDS Malaria Indicator survey 2015 and Tanzania Demographic Health Survey 2015/16.
3.0 Population Sample and Sampling Techniques

The assessment work used purposive and convenient non-probability sampling techniques to sample respondents. Purposive sampling was employed to get key informants for this work and convenient sample was used to get respondents from the community. Sampling procedure using non-probability sampling techniques of purposeful and convenient sampled 51 respondents both key informants and community members.

Table 5: Population Sampling

<table>
<thead>
<tr>
<th></th>
<th>FGD</th>
<th>KII</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>Kibaha District</td>
<td>8</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Morogoro District</td>
<td>8</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>Morogoro Rural</td>
<td>8</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
<td>24</td>
<td>8</td>
</tr>
</tbody>
</table>

3.0 Data collection methods

The three data collection methods used in the assessment work are explained below:

3.0.1 Focus Group Discussion

This method was used to assess general knowledge on malaria, malaria investment and gender roles with regard to malaria prevention and control in the country. In this method a total of 4 Focus group discussions were conducted to 32 participants whereby 24 were women and 8 were men. Each group had 8 participants, among them twenty (20) were women community members and four (4) women were extension workers from the community. In addition there was a male Focus Group Discussion which consisted eight (8) men of which five (5) were extension workers and three community members.

3.0.2 Interview

Interviews were conducted to key informants with the aim of gathering data and information in order to establish gaps in malaria investment and gender roles. Key informants in this assessment were a member of the health committee, Acting district medical officer, Malaria focal persons, Community Development Officers, District Nursing Officers, District pharmacist, and District gender Officers. The data collected...
from key informants were on knowledge of respondents on malaria investment, roles of individuals and their organizations with regard to malaria, Gender roles related to malaria prevention, accessibility and availability of malaria services and participation in malaria prevention.

3.0.3. Direct Observations

Participatory direct observation was used to collect data on the environment of the facility, state of repair of the facility infrastructures and communication skills using non-verbal cues such as body language, facial expressions, reactions, group dynamics and side comments were all clues about how they really feel or reveal new details or questions on malaria investment.

3.0.4. Reviews of Relevant Documents

In this review, documents and policies reviewed were: Tanzania National Malaria Guidelines and Standards, National Malaria Control Strategic plan 2014-2020, Tanzania Malaria Operational Plan 11 (2015), and (2017) National Budget Ministry of Finance (FY 2013/14), malaria investment at National, Region, District, Facility and community. The review enabled the team to get an understanding of internal and external source of funding for malaria management and prevention (Fig 3&4). Document review also provided information on malaria trend in the assessed localities and at national level. Facility records showed reduction in number of malaria cases but the infection remains ranking the highest among top ten diseases. Information on magnitude of malaria, activities planned and implemented in regard to malaria prevention and management were also seen.

3.1 Quality assurance

Pretested of data collection tools were carried out in Ilala to see its logical arrangement, validity of questions and applicability using selected data collectors. Orientation on modality and scope of work was done to data collection assistant and quality assurance protocol was adhered to in all sites visited. This was carried out before the actual data collection is carried out.

INFORMED CONSENT AND

CONFIDENTIALITY: Informed consent was obtained from all interviewees and fieldwork participants. Where participants were orally informed of the purpose of the analysis and the structure of the focus group and/or interview, as well as the risks and benefits of their participation and communicated on the confidentiality clauses.

3.2 Limitations

One of the limitations is the prevailing situation on difficulties in obtaining financial information due to bureaucratic processes and weak level of Public Private Partnership. Moreover this portrays violation of rights of the community of their right to timely and accurate health information (Budget Advocacy Booklet). Another limitation is that the role of the community on malaria investment is not well explained, which made them unaware of what they are supposed to do in this task as beneficiaries.

3.3 Results:

3.3.1 Challenges on Malaria investment

Following this study it has revealed that malaria investment is more donor dependent, which explains why in the regional and district budgets malaria is not comprehensively reflected. I.e. NMCP did not issue the allocated funds as stipulated in Figure 3 and District councils respectively. With local funds the country investments indicate a declining trend both at national, Regional and District level. Adolescents are not well addressed as they are vulnerable groups which contribute 16% in 556 end indicate Maternal Mortality Ratio. (TDHS 2015/16)

Despite of a score in the study that majority of respondents were knowledgeable of malaria, few among them were aware of environmental management as a primary strategy in prevention of malaria. Likewise TDHS 2015/16-MIS reported the same that 98% men and women were knowledgeable of malaria prevention sleeping under mosquito net, where by 20% of women and 25% of men were aware of the environmental strategy (clean environment). No guideline neither resource allocated for community intervention on environmental management.
3.3.2 Population distribution in Morogoro and Kibaha Districts

Table 6: Population distribution in Morogoro and Coast Region

<table>
<thead>
<tr>
<th>District</th>
<th>Male</th>
<th>Female</th>
<th>Total population</th>
<th>Average house hold size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kibaha TC</td>
<td>--</td>
<td>-</td>
<td>128,488</td>
<td>4.2</td>
</tr>
<tr>
<td>Census 2002</td>
<td>151,700</td>
<td>164,166</td>
<td>315,866</td>
<td>4.2</td>
</tr>
<tr>
<td>Morogoro Municipal</td>
<td>140,824</td>
<td>145,424</td>
<td>286,248</td>
<td>4.1</td>
</tr>
</tbody>
</table>

Source: National Bureau of Statistics Regional Profiles (2012 Census) 410

3.3.3 Area of Assessment:

Morogoro Region and the Coast Region were the two areas covered by this activity and was purposed sampled by TANAM. Morogoro District being a pilot area for larviciding are among reasons for inclusion.

i) Morogoro Region

Morogoro region is among Tanzania’s 30 administrative regions and is the second largest region after Tabora which has about 73,039 square Kilometers. Morogoro has a population of 2,218,492 according to 2012 National Census. Of this population Women are 1,125,190 while men are 1,093,302 with an average of 4.1 people per house hold. It is bordered to the north by Tanga Region, to the East by Coast and Lindi Regions, to the South by the Ruvuma Region and to the west by Iringa and Dodoma Regions.

The region has six administrative Districts of Morogoro, Kilombero, Kilosa, Gairo, Mvomero and Ulanga. Formed by 212 Wards, 673 Villages, 293 streets, 3,451 Hamlets and 10 constituents (Parliamentary administrative areas within the region). Two districts in Morogoro region namely Morogoro Urban and Morogoro Rural were covered in this work.

ii) Coast Region

The region is among 30 Administrative regions in Tanzania with its regional capital being Kibaha and has a population of about 1,098,668, according to 2012 National Census. It is bordered to the north by Tanga Region, to the East by Dar es salaam Region and Indian Ocean, to the south by Lindi Region and to the west by Morogoro Region. Kibaha is among the six districts of the Coast Region. It is also a capital of Coast Region. It has a Population of 128,488 as per 2002 National Census.

3.4 Findings

The findings of this assessment are presented based on the objectives as shown below:

Alignment of malaria control investments with the policy priorities

Policy documents which were assessed in line with malaria investment were: Health sector Reform + Decentralization and Public Private Partnership-((2012) ,National Healthy Policy (2015),Tanzania Human Development Report (THDR;2014) and the Economic and Social Research Foundation (ESRF) .

The policies reviewed revealed that in one way or another disease prevention and control is a major priority which needs the establishment of concerted effort among all players in fighting against malaria through improvement in malaria investments ,capacity building and Advocacy using media and civil society organization(CSOs). The study also revealed that policies prepared at the national level are only distributed to implementers. Policy dissemination is not conducted hence most of the policy implementers do not understand what is supposed to be implemented by them especially at the grassroots level. It was also found that the country is lagging behind the Abuja declaration (2000) on the investment
on health sector of which 15% of the country budget is supposed to be invested on health.

For example in financial year 2013/14 only 9.2% was budget for health. It was also observed that there is a big shortage of qualified health professionals at all levels of health services that are provided. In addition respondents revealed that there is a prevailing poor environmental sanitation with regards to malaria vector prevention and control which shows that still investments in malaria is not realized in order to provide the needed result to the community. Therefore, effort should be made through advocacy and capacity building to bring about design thinking in malaria investments, prevention and control at community level.

i) Government Resource Allocation for Malaria.

Table 7: Government resource allocation for Malaria Control

<table>
<thead>
<tr>
<th>SOURCE DOCUMENT</th>
<th>FY</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ministry of Finance</td>
<td>2013/14</td>
<td>1.498 billion Tanzania shillings (Tshs). for health sector</td>
</tr>
<tr>
<td>Annual Report 2014</td>
<td>2013/14</td>
<td>92.05 billion (Tshs) for procurement of medical supplies and capacity building</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20 billion (Tshs) to strengthen PHC construction of Dispensary in each village.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>385.03 billion(Tshs) for TB,HIV/AIDS and Malaria</td>
</tr>
</tbody>
</table>

ii) National budget and non budgets

Health services costs are achieved using a variety of funding sources. However the country budget usually does not specify malaria stand alone budget but rather reads Ministry of health budget. Budgets become specific at relevant ministry, and programs such as TNMCP, as displayed in chart 1.

With reference to Malaria Operational Plan 2015/16, The non budgetary local resource for malaria or health care in general include the user fees and social security funds, that include National Health Insurance Fund, (NHIF), Community Health Fund (CHF), local resource mobilisation ensures sustainability of quality health services. Non budgeted local resources was estimated to have the potential of raising 52.4 billion Tsh. Annually. The study noted is significantly that malaria being a vertical programme most of the respondents including health care providers/council workers were not aware of the malaria budget in their respective sites since they don’t budget for ant malarials except for Sulphadixine Pyremethamine( SP) for IPTp .Heavy funding source is external from donors/partners i.e. (PMI, Global Fund, JICA, SIDA, UK and DFID ) These funds from different donors and partners are filling the financial gaps of the National Malaria Strategic Plans which were developed for implementing the National health policy priorities. The study found that Malaria, the greatest killer disease with the highest number of OPD cases in Tanzania has been given high priority at policy level. However malaria is not given priority in domestic resources allocation and the situation is getting worse as years go by. For example, National Health Account (2009/10) reported that donors contributed about 40% of the total health expenditure likewise the house hold out of pocket contribution was 34% and the Government budget was 26% (<15%of the population had health insurance. Currently according to Malaria Operational Plan FY 2016 PMI and Global Fund contributed about 90% for malaria services, the remained given by other partners including the Government.
This situation is calling for a transformation that will guide the Tanzania government and its citizen to look into tools for sustainable local resource mobilization for accelerating quality health access and malaria prevention and control in particular. Deliberate country efforts toward local resource mobilization cannot be avoided today because as noted since 2006, donor fatigue is experienced year after year.

While the country is looking for new tools for local resource mobilization serious interventions need to be carried out in order to have more recruitment of NHIF and CHF members. Today Only approximately 23% of the population enjoys Health insurance services. The study also noted the need for review of the user fee so that all the community members (rich and poor) may have the power to access formal health services.

It was revealed that 3584 (55%) of health facilities among 6,518 have been accredited to offer health services countrywide by June 2015. This indicates another gap in access of malaria services by 45% in areas where these schemes have not been established. The need for local resource mobilization in order to make sure that all the health facilities are accredited is greater now than ever before due changing situation of donor funds.

iii) Government credibility

» The Government is found to have a great contribution for human resource investment-paying salary to almost all health;

» Care providers working in public and designated health facilities. In view of the National annual budget (2013/14) a total of Tsh. 32.33 billion was allocated for salaries and other health services mainly training for health workers which is Approximately (9.2%) of country budget 2013/14.

» According to Presidents Office Planning Commission Report (2014). Construction on the BTI (Bacillus Israellisasis) plant in Kibaha in partnership with the Cuba Government cost Tsh. 10,387.9 billion In view of Cuban and Tanzania governments agreement most of the products which are for Malaria larviciding activities will be sold internally through the district councils and urban Authorities budget. The challenge for malaria team is on how best they can use the created enabling environment to prioritize the local government resource for malaria larviciding activities.

Malaria funding at Regional and District level financial year (FY) 2013/14-2016/17

Morogoro Urban as per FY 2013/2014 the amount of fund issued was 10,000,000. Tsh whereas 2014/2015 17,000,000 Tsh and 2015/2016 10,000,000.. Morogoro rural malaria budget has been inconsistent at a decreasing rate; FY 2013/2014 the sum amounting 3,550,000Tshs was issued and FY.2014/2015 Tshs 3,524,000. None was allocated on FY 2015. Tshs 1,026, 000 was issued in 2016/2017.

In Kibaha District in the period of five years from FY 2013/2014-2016/2017 there was only one year with allocated budget amounting Tsh.1,050,000. and this was FY 2016/2017. However the fund was not yet issued as of February 2017 when the assessment was in progress. In some cases Total budgets allocated were not issued for all planned activities in respective districts. For example Morogoro Municipality in financial years 2014/2015 -2016/2017 a total of Tshs.62, million was allocated for malaria activities but only Tsh 52 million were issued which is 83.87% of the total budget allocated. In the Coast Regional as from FY 2014/2015 -2016/2017 Tsh 80 million was allocated but only Tsh. 17 million was issued (FY 2013/14) that is (21.25%) for the planned intervention is 22.7% of the total population. 6,185 or 55%of health facilities have been accredited to offer health services using the Health Insurance facilities countrywide.

» District Authorities are not aware of the foreign investments that are coming to their districts through central government procedures. Activities that are planned and implemented through the central system appear to have weak cash flow performance. Coastal Regional Malaria Office is a living example which had allocation budget source from NMCP (Tsh. 80million for 2014-17 but received only Tsh, 17 mill. in financial year 2013/14. On the other
hand Malaria Vertical Programs like Medical Stores Departments (MSD) knows nothing on malaria budgets. According to the Medical Stores Department (MSD) Vertical Programme respondent, said that MSD's role is to receive malaria supplies and equipments, store and distribute them to the respective facilities.  

» Inadequate/Lack of coordination between malaria actors for tracking malaria investment. For example, Kibaha District Council members are not well informed with activities done by malaria CBO's within the District as narrated by District Community Development Officer during dissemination meeting.
<table>
<thead>
<tr>
<th>Region</th>
<th>District</th>
<th>Facility</th>
<th>2013/14</th>
<th>2014/15</th>
<th>2015/16</th>
<th>2016/17</th>
<th>Total Allocation</th>
<th>Total Issued</th>
<th>% of Issued</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Amount Allocated</td>
<td>Amount Issued</td>
<td>Amount Allocated</td>
<td>Amount Issued</td>
<td>Amount Allocated</td>
<td>Amount Issued</td>
<td>Amount Allocated</td>
<td>Amount Issued</td>
</tr>
<tr>
<td>Morogoro</td>
<td>Urban</td>
<td></td>
<td>10,000</td>
<td>10,000</td>
<td>17,000</td>
<td>17,000</td>
<td>15,000</td>
<td>10,000</td>
<td>20,000</td>
<td>15,000</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td></td>
<td>3,550</td>
<td>3,550</td>
<td>3,254</td>
<td>3,524</td>
<td>0</td>
<td>0</td>
<td>1,026</td>
<td>1,026</td>
</tr>
<tr>
<td></td>
<td>Morogoro</td>
<td>Mtego wa Simba HC</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1,050</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mkoani H/C</td>
<td>20,000</td>
<td>17,000</td>
<td>20,000</td>
<td>0</td>
<td>20,000</td>
<td>0</td>
<td>20,000</td>
<td>0</td>
</tr>
<tr>
<td>Regional</td>
<td>Office</td>
<td></td>
<td>20,000</td>
<td>17,000</td>
<td>20,000</td>
<td>0</td>
<td>20,000</td>
<td>0</td>
<td>20,000</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>33,550</td>
<td>30,550</td>
<td>40,254</td>
<td>20,524</td>
<td>35,000</td>
<td>10,000</td>
<td>42,076</td>
<td>16,026</td>
</tr>
<tr>
<td>% of Issued/Allocated funds</td>
<td></td>
<td></td>
<td>81%</td>
<td>51%</td>
<td>21%</td>
<td>38%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 9: Malaria investment external source – FY 2013-2017 according to the collected data

<table>
<thead>
<tr>
<th>Funding source</th>
<th>Financial Year</th>
<th>Amount in US D.</th>
<th>Activities to implemented</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMI</td>
<td>2016/17</td>
<td>45,Million</td>
<td>Training and supervision of Providers on IPTp3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Provision of ITNs to pregnant women and artesunate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1million</td>
<td>Procurement, ACT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>900,000</td>
<td>Procurement of mRDT</td>
</tr>
<tr>
<td>SWISS Agency</td>
<td>2013/17</td>
<td>6 million</td>
<td>TA to ITN and case management</td>
</tr>
<tr>
<td>DFID</td>
<td>2014/16</td>
<td>36Million</td>
<td>Voucher system cut short before 2016</td>
</tr>
<tr>
<td>Global Fund</td>
<td>Jan 2016/17</td>
<td>83million</td>
<td>ITN</td>
</tr>
<tr>
<td></td>
<td>December</td>
<td></td>
<td>Case management</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Use of RDT’s and ACT</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Improve Quality of care in children with severe malaria.</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>171,900,000</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: Tanzania Malaria Operational plan 2016

Malaria Situation

» Morogoro and Coast regions are malaria endemic. In 2014 to 2017 Malaria trend has a declining as per national trend for under five children. RMNCH One plan 11(2015). Investments through various strategic interventions/tools have contributed to these results. However, malaria has remained the leading among top ten diseases in health facilities with high morbidity and mortality.

Table 10: Malaria trend in Morogoro Rural

<table>
<thead>
<tr>
<th>YEAR</th>
<th>2015</th>
<th>2016</th>
<th>REDUCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>POSITIVE MALARIA CASES</td>
<td>128,484</td>
<td>19,798</td>
<td>108,686(84.59%)</td>
</tr>
</tbody>
</table>

This goes in line with national malaria survey which indicates a reduced prevalence. In view of the three in one principle (Test, Treat and Truck) this study has identified gaps in its implementation as it was learnt that occasionally, malaria commodities run out of stock example in Kibaha Artemether Lumefantrine (ALU) went out of stock for one month where as mRDT was not available for 4 months.

Urban versus Rural in relation to malaria information.

» Rural population has less or no knowledge regarding malaria consequences to children and pregnant women. Malaria incidence is more in Urban than in rural setting despite of urban population having broader knowledge on malaria. This is mainly contributed by poor sewage systems, poor environmental hygiene, late sleeping due to economic activities and social activities such as watching football and TV cinemas.

HMIS

Retrieval of health information in facilities is inadequate. One provider said ‘I will not be able to give you data because the in charge is not around. Poor data management and reporting is a barrier that hinder development at all levels.
3.4.1 Interview findings

Knowledge on malaria

ALL respondents showed an understanding to malaria at 17/17, which is equivalent to (100%). A greater percent among them are aware of the most affected population, which is under five years children, pregnant women and elderly (9/17) 52.94%, although the school health survey 2016 has indicated school children aged 7-9 years have been reported to be more affected with malaria than <5 years.

Magnitude of malaria

All respondents agreed that malaria is a threat in their localities and that it ranks higher among first two top ten diseases. Malaria is the leading cause of in morbidity and mortality. Morogoro Rural reported malaria as the leading cause of in morbidity and mortality. Morogoro Municipal respondents had different levels of understanding. Among them two (2/17) 12% said malaria was not number one where as one respondent said the last disease among top ten and one said the third disease out of 17: This indicated some weaknesses in sharing data and malaria information the through the formal information system.

Roles of respondents in relation to malaria

» Most respondents reported their primary role in malaria was to offer client education on prevention of malaria and give treatment and care to patients with malaria while adhering to treatment guidelines and standards, Their experience has been of different aspects; there are those having experience in budgeting for malaria services where as others have expertise in conducting supportive supervision, mentorship, training and sensitization. Almost all of them are well informed of the magnitude of the malaria burden in their locality and its trend in regard to population most affected and periods for malaria epidemics.

» Health care providers said their major role include giving health education on malaria prevention to the community and individuals within health facilities meetings, and to offer treatment and care to patients with malaria, including IPTP; Malaria Focal personnel has an additional task of sensitization of the community in malaria prevention, mentorship to providers on MRDT and distribution of ITNS (4/17) 24%; Social worker Officer contributes in sensitization and referral link of patients from community to health facility; RHMT members have the role of supervision to health care providers and services in general. They are responsible in ensuring that standards and guidelines for malaria are adhered to.

Community involvement to fight against malaria

» Community volunteers that include Community Change Agents(CCA), Community health workers (CHW) invest time in distributing nets and providing health education and malaria best practices at household levels Their contribution has high impact in getting good results in the malaria elimination process.

» A good number (13/17) 76% of respondents reported that women were more involved in malaria prevention as they were observed to perform environmental hygiene to destruct mosquito breeding places, ensure family members sleep under treated net, and pregnant mothers involved in taking two or more doses of IPTP. Men were involved in covering windows with mosquito gauze wire where as rarely they participate in buying insecticide mosquito spray and cleaning of the environment. (15/17=88%) of the Respondents shared various strategies and investments in place such as ITN”s use for universal coverage (donor fund), Intermittent Preventive Treatment during Pregnancy (IPTP ) (Government Budget) , community and district councils contributions for environmental hygiene and client education, correct treatment and early health seeking behavior which receive financial support from the Local and Central budgets.
3.5 NGO’s involved in malaria

TANAM - is piloting larviciding and environmental management for malaria prevention in Morogoro urban in collaboration with the community and the urban council. TANAM coordinate, facilitate trainings, sensitize and advocate for review of some policies and bylaws, mobilize resources, monitor progress and manages the initiative. The Urban Authority provide technical expertise on Larviciding; monitor and evaluate achievements. Each household contribution is Tsh 4,000 per year and each institution contributes Tsh, 40,000 -200,000 per year.

**PSI- ITN social Marketing for ITNs in Coast and Morogoro Regions.**

**Tanzania National Malaria Control Program (TNMCP)**

This is the organ responsible in preparing and disseminating guidelines for malaria management, budgeting and procurement of ant malaria drugs. Training of health care providers in any updates related to malaria management. M&E of malaria services, magnitude and supplies.

3.6 Key Findings - Discussion

**Malaria investment**

Traditional source of domestic funding for malaria and health includes (i) Government (Central and local governments) budgets (ii) National Health Insurance Programs (National Health Insurance Fund (NHIF) through the Central Government system and Community Health Fund (CHF) through Local Government Authorities. NHIF & CHF benefits approximately 23% of the total population (iii) User Fee for health services and (iv) Operational Programs expenditure

The study however revealed that malaria investment was mainly donor dependent in getting supplies, drugs, equipments, M&E including other administrative activities. These donor groups include PMI, DFID, Global Fund, UK, JICA and others according to National Malaria Strategic Plan 11. The Tanzania government investment on health is largely on human resource and infrastructure thus health and malaria services cannot be sustained in the event donor and partners withdrawal their investment. The situation calls for other actors like the NGO’s, CSO’s and the private sector to complement Government efforts in ensuring continuous and sustainable malaria services in the country, aiming at eliminating malaria by 2030.

The NMCP and MOH needs to strategically review tools for local resource mobilization for malaria and health services during this period when the country is rolling out the National Big Results Now Initiative which was announced by President Jakaya Mrisho Kikwete in February 2015 as part of the Tanzania Government’s effort to transition the nation from low to middle-income economy. The economic transition is directed towards industrializing the economy hence influencing the government and the private sector to invest on industries such as ACT production that may boost the health sector. By investing on ACT production the country will also boost local agriculture sector market for Artemether crop.

As found in KII and FGD most respondents were not aware on the malaria budget in their respective sites including those responsible for coordinating and rolling out malaria initiatives i.e. malaria focal persons and pharmacists. In Morogoro and Coast regions where the rapid assessment was conducted the district authorities had documented budgets that indicated the National Malaria Control Program allocated funds for malaria activities but the release of this funds has not been consistent.

On the other hand, the study found out that few partners namely PSI, Care International -Malaria Care and TANAM who are support selected Council on malaria activities such as training, mentoring, supervision, ITNS supply through social marketing, larviciding, environmental management and sensitization/awareness raising on malaria best practices.

3.7 Conclusion

In general the assessment has been able to examine malaria investment in National and local levels which is more of finance from Government and malaria Partners in relation to country strategic directions. Great achievements have been made to date. However evidence revealed that the National, Regional and district authorities Investments are declining year after year and there is no Country Malaria Sustainability
Strategy (CMSS) to guide the malaria elimination investment process.
If the Country is to achieve the Malaria elimination by 2030 and sustain the achievements there is a need to assemble the long term domestic investments especially those that are offering life saving goods and services like the LLINs and BTI production and the human resource and use the existing opportunities to invest on local supply of ACT and address other critical health issues.

Health system strengthening and especially community based health system where families and communities are effectively engaged and participate fully in the development process that is policy formation, program design, planning and implementation is very important part for achieving the intended goals.

The family is the primary actor on health issues and there are potentials for local authorities and other actors through effective multi-sectoral approaches to allocate adequate resources for mitigating malaria with various improved strategic tools in different localities. Evidence showed the need to review policies and improve tools for local resource mobilization especially in areas related to User fee, Community Health Insurance and National Health Insurance.

Last but not list is the need for strengthening networks and developing strong Resource Mobilization activities as vehicles for reaching the desired destination through effective of community health linkages and coordination of all health actors, promotion of resource mobilization tools and advocacy services.

3.8 Recommendations

**Government**

» Community Health System Strengthening will enable tracking of local engagement in Malaria elimination Strategy, analyzing stake holder’s contributions and creating an enabling environment for local resource mobilization by focusing on the following actions.

» Strengthen Health information System for Health service improvement (malaria and RH) Health System Strengthening works better when data is available. M&E component is important especially in malaria control program because the reliable measurement indicators...

» District need to be aware of the importance of local contributions in environmental management and their role in the malaria elimination process in developing community based sustainability strategy.

» The Council Health Management Team should be well informed on any activity done in their District related to health. They are the ones to ensure the health of the community in a particular area. IDSR require their understanding so that action can be taken early.

» Facilitate Linkages; coordinate and track performance of key stakeholders that include Private sector, government ministries & departments, CSOs, & Community by mapping and analysis stakeholder’s investments at all levels. During CCHP all partners should be effectively engaged and allocated budget to implement relevant activities as per organization/individual capacity.

» Review current community resource mobilization tools to strategically match with the national economic and social development trends.

**Civil Society Organization**

» Community engagement with health facilities in their localities is key for whatever need to be done through health boards/committees. Health Boards may actively engage community members in matters related to health promotion and fundraising activities as per government policy. All level of planning and implementation of malaria initiatives require effective community participation through their representatives. Effective engagement may improve program implementation and develop community sense of ownership.

» Advocate for a national health fund to support over arching health issues that is independent from government bureaucracy.

» Improved Community Based Networks for Conducting Advocacy for National health policy improvement may bring high impact in the malaria elimination process especially on the review of the User fees policy and development...
of new tools for accelerating National Health Insurance and Community Health insurance program rollout. The Community Based Networks have the ability to represent the vulnerable communities in all the policy and program development processes through effective participation at different levels of development and raise the voice of the needy in various health issues.

**Public Private Initiative**

» Following Malaria elimination strategy by 2030, the current National Health and NMCP Malaria Strategies, Malaria Safe Initiative for private sector, the Tanzania Big results now initiative and health challenges that include stock outs of ACT, there is an urgent need for the country to use these opportunities in investing on ACT production in the country. Any industry requires to meet three main criteria; one resources for processing, Skills or Technology and the market. All these are available within the country and partners.

» The investment will benefit the country by not only addressing the ACT stock out issues but it will also transform the economy by creating employment in the ACT pharmaceuticals industry. Agriculture sector will benefit by opening a new market for artemether crop hence boosting agriculture production and increasing farmer’s income. The country will also benefit from saving heavy resources which are used for purchasing medicine from Abroad and reduce the vicious circle of poverty.

» The local Government and Urban Authorities need to make use of Kibaha BTI Investment in promoting BTI social Marketing using the TANAM Pilot study experience which indicated that the community consider larviciding and Environmental Management as a key intervention in eliminating malaria and they are willing to contribute an average of 2,000-4,000 Tshs for larvicides at household level and Tsh. 80,000-200,000 for institutions. Each year larviciding is conducted twice following the period before long and short rains.
Appendixes

Appendix 1------KII

INTERVIEW GUIDE ON MALARIA INVESTMENT, GENDER AND HUMAN RIGHTS.

Region……
District……………………. Facility…………………………..
Title…………………………………..
Date……………………………..

Purpose; Key Informant Interview in this assessment will include managers from National, Regional, District and facility levels:

Objectives of the KII is to :
» Obtain information on the malaria investment since 2013/14 -2016/17 in all levels.
» Determine the government resource allocation for malaria control in budget estimates
» Identify community awareness on human rights in malaria management
» Determine the contribution and participation of CBO’s and NGO’s in malaria investment.
» Recognize gender impact on malaria

Respondents include the Program Manager (National Malaria Control Program (NMCP), Manager MSD, Regional RMOS and District Pharmacists. DMO, NGO and CBO’s representatives, Facility In charge. Health Committee members, DCDO, WCDO:

Malaria Investment

1.0 Malaria general knowledge
» For how long have you been engaged in malaria program/services?
» What is your role in malaria program /service?
» What is the role of your organization in malaria?
» How does it link with malaria and other services Water Sanitation and Hygiene, Reproductive Maternal Neonatal Child Health?
» How do you find - is malaria a threat to Tanzania community/region/locality?
» How big is the problem? Number of clients in a certain period. (2consecutive years 2015/16)

Area of survey; District ________________________________

Date for interview_____________________________________

Name of the interviewee (Not necessary) ___________________

The Tanzania National Malaria Movement (TANAM) is conducting a rapid assessment on malaria investment to complement government efforts to achieve its vision of “A Malaria Free Tanzania” with mission to accelerate effective malaria interventions for prevention and treatment among vulnerable populations in the country. The assessment aims at looking variations in malaria management between urban and rural, between the rich and poor. Between endemic and epidemic malarial prevalence. Moreover the survey will look on human rights and gender related to malaria management.

Since you are among key stake holders thus your participation is of a great importance so as to enable the program obtain as much as possible information which will help in the development of strategies to promote malaria investment.

Do you have any question?
» What is the trend?
» What strategies in place do you have to reduce /prevent the problem of malaria?
» Where does malaria range among top ten diseases?

2.0 Malaria investment
» How much budget has been allocated since 2013/14-2016/17?
» How was it utilized?
» Any other source of funding/ amount
» Can I see the budget plan for 2013-2017
» Is it adequate? If not how much is the gap? Why?

Community Participation on Malaria
» Mention CBO’s and NGOs that work integrated with malaria in your setting
» How do they involve the community in malaria management?
» What is the human right related to malaria-Health facilities how do they involve the community? Is human right exercised in provision of malaria management? How?

Gender Roles
» Between men and women who carries a heavy burden of malaria? How?
» Between men and women who makes decision for the patient to be taken to the hospital? When is the decision reached? What guides that decision?
» How long does it take to reach to the health facility?
» How much does it cost to treat a patient for malaria
» Does every community member manage to pay? If not what does the community do to save the patient.

Programs/NGO’s responsible with Malaria
» NMCP is it functioning? How? Who works in partnership?
» MSD is it functioning? How does it work in regard to malaria?
» What is the impact of malaria to TB and HIV?
Appendix 2: FGD Interview Guide, Men, Women

This guide is in place so as to obtain information from the selected groups in urban setting and rural, among men and women in matters related to malaria investment, gender and human rights. This information will inform the level of integration of malaria services in the community through formal and informal system.

Knowledge and attitude related to malaria
» Who is the most affected population with malaria in the community? (MEN, WOMEN, CHILDREN, GIRLS AND BOYS)
» Who is most responsible person in prevention of malaria at the community and family level
» How?
» What activities does he/she do?
» Who makes decision on seeking health services related to malaria at family level? A man or a woman? WHY?
» How much does it cost to treat malaria to the individual in the family
» What is the impact of malaria to the under five, pregnant woman women
» What is the malaria health policy that you know; Does it work or adhered?

Community participation in malaria control campaigns
» Have you ever participated in any malaria campaign? How? Was it of benefit? How?
» Are you aware of any CBO/NGO working in link to malaria in your locality? Mention them/it. How does it link with community/individuals?
» Environmental sanitation is one component of malaria prevention how does your community participate in this? Do men and women both participate or not – Clarify
» Are you aware of human rights related to malaria? What are these mention them.
» Who take care for the sick at home?

Knowledge on malaria from vendors/Addo shop
» When lastly were you treated for malaria
» In a month what is the commonest health problem do family members suffer. How often in two months.
» When were you told that no drug for malaria go and buy to the vendor or ADDO shop.
» Was the instruction inclusive of malaria prevention at then ADDO shop? Were you given any kind of client education related to malaria in ADDO and in the facility?

Malaria Investment
» Are you aware of the budget for malarial at your facility/
» If yes was it worth? Was it enough?
» If no why are you not aware of it?
» How much funding was available? what was the source of that fund.