Mangochi ICEIDA Partnership in Public Health

Programme Document 2012 – 2016 - MAL 12220-1204

Part II of the Mangochi Basic Services Programme (MBSP)

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Preface

The following document describes the cooperation between Mangochi District and the Icelandic International Development Agency (ICEIDA) in the health sector, as stipulated in the Country Strategy Paper (CPS) for Iceland's development cooperation in Malawi 2012-2016.

This programme document forms a part of the Mangochi Basic Services Programme (MBSP) Master Programme Document – MAL16050-1201. The overall programme approach and management structures are stipulated in the Master Programme Document.

The ICEIDA Mangochi Partnership in Public Health Programme is subject to the tripartite partnership agreement on funding, management, implementation and monitoring, between the Ministry of Local Government and Rural Development (MoLGRD) and Mangochi District Council on behalf of the Government of Malawi (GoM) and ICEIDA on behalf of the Government of Iceland.

This Programme Document was prepared in cooperation between the District Health Management Team in Mangochi with participation from DHO Mangochi; DHMT Mangochi; ZHSO in Zomba; MoH Malawi; ICEIDA Malawi and ICEIDA HQ. The programme is based on the priorities and strategies identified by national and local health authorities.

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Executive Summary

Public Health is a key area of cooperation between Iceland and Malawi, as stipulated in the CSP for Malawi and the Strategy for Iceland´s Development Cooperation. The modality provided by the CSP is a Programme Based Approach at the district level in Mangochi District. The partnership in health between the Mangochi District Council and ICEIDA in 2012 to 2016 is the successor to ICEIDA's projects in TA Nankumba from 2000 to 2011. Health is one component of the Mangochi Basic Services Programme (MBSP), the other components are water and sanitation, education and institutional capacity building.

The mission of the District Health Office (DHO) is to improve the quality of life of the people of Mangochi by reducing the risk of ill health and occurrence of premature deaths, thereby contributing to the social and economic development of the district. This programme specifically aims to reduce maternal and neonatal mortality rates. The specific objective of the partnership is to increase availability, access and utilisation of high impact, quality maternal and child health services in Mangochi District. It is assumed that successful intervention will result in reduced risk of maternal deaths as well as infant and child mortality.

The Health Sector Strategic Plan (HSSP) 2011 to 2016 summarises achievement of the health sector in Malawi from 2004 to 2010. There has been reduction in infant- and child mortality rates from 76/1,000 to 66/1,000 and 133/1,000 to 112/1,000 respectively, and in maternal mortality from 984/100,000 to 675/100,000 with an increase in women delivering in health facilities from 57.2% to 71.5%. There has also been a reduction in pneumonia case fatality (from 18.7% in 2000 to 5.7% in 2008), an increase in children with acute respiratory infections taken to health facilities for treatment (from 19.6% in 2004 to 65.7% in 2010) and 26% increase in immunisation coverage (children 12-23 months old fully vaccinated) with 81% fully vaccinated in 2010. There has been an increase in HIV infected persons accessing anti-retroviral treatment from 3% in 2000 to 65% in 2011. In spite of this progress at the national level, the Mangochi District lags behind in many ways. Of note is the fact that HSSP ranks Mangochi fourth lowest among Malawi's 28 districts as regards access to health services.

Despite the gains made in Malawi there are still a number of factors that need to be addressed that negatively impact on the health of Malawians, namely availability and quality of health services, access to health services and environmental and behavioural issues. Weaknesses identified in the HSSP included shortages of human resource and inequitable distribution, weak referral systems and overreliance on hospitals for primary health care delivery, poor performance of contractors in infrastructure, rising costs and donor dependency. The HSSP proposes to sharpen the focus on public health interventions including health promotion, disease prevention and community participation. The main priority in the health sector in Malawi in 2012 to 2016 will be interventions that are cost effective and expansion of services to the under-served.

The overall objective of the MBSP is to assist the Government of Malawi and the Mangochi District Council to improve living standards in the rural communities in Mangochi District. This programme specifically aims to reduce maternal and child mortality rates in Mangochi District. The present programme is based on the priorities and strategies identified by national and local health authorities in preparation for the current planning cycle (2011 to 2016). The broader focus of this programme is on improvement of infrastructure in health facilities, expansion of infrastructure for high impact, quality reproductive health services, strengthening of health support and community health service delivery systems, and building and strengthening human resource capacity, with a particular focus on health services organisation and management. The programme takes note of the intentions of the HSSP to prioritise expansion of services to the under-served and aims to improve not only access to

health services but also improve the quality of health services and the working environment of health personnel.

The immediate objective of the programme is: *Increased availability, access and utilisation of high impact, quality maternal and child health services in Mangochi District.*

The main outputs of the programme are the following:

1. **Improved health services infrastructure**
   1.1. General infrastructure in the network of the MoH health centres is strengthened
   1.2. Improved infrastructure and equipment in maternal and child health services in HCs
2. **Increased coverage of high impact, quality maternal and child health services**
   2.1. Improved referral services
   2.2. Strengthened Community based health services
3. **Improved capacity of the health system to deliver services**
   3.1.Improved working conditions for public health (PH) support staff at the DHO
   3.2 Institutional capacity strengthened at the DHO
   3.3 Improved health management information system

The primary target group is the population of Mangochi District with priority given to the poorest communities in rural areas. The community at large will benefit from improved access and better health services, particularly women, children and families. Secondary beneficiaries will be field workers, community development committees and various staff at the DHO through participation in programme activities, training courses, etc. which is expected to increase their capacity to deliver services.

Successful implementation depends on a number of assumptions including sustained political commitment at national and local levels, uninterrupted funding to and within the district, good collaboration with all stakeholders, adequate human resources, availability and reliability of contractors in infrastructure, and sufficient drugs, materials and fuel.

At the end of the partnership there will be better health infrastructure, facilities, equipment and vehicles, functional community health structures and a pool of trained health workers. There will be better health status of the population as measured by impact indicators such as maternal, under five and infant mortality rates. Through training and equipping the HSAs it is expected that access of health services in rural areas will increase in the communities, measured by indicators such as births attended by qualified health workers, immunisation rates. Health information and data collected will have improved as a result of strengthened health management information systems. Subsequently, there will be better access to information for planning and financing. Sustainability should be aided by the fact that ICEIDA's contribution respects strategies and priorities put forward in the MGDS-II and HSSP 2011 to 2016.

The programme budget funded by ICEIDA for 2012 to 2016 is expected to be around USD 6 million.

Progress and performance monitoring will use the strategy and mechanisms of the DHO/DHMT/DCT. ICEIDA and DCT will jointly formulate a monitoring and evaluation plan for the program, which will focus on strengthening the monitoring capacity of the district.

Abbreviations and acronyms

AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal care
ARI	Acute respiratory infection
ARV	Anti-retroviral
CHAM	Christian Health Association of Malawi
CHW	Community Health Worker
CMW	Community midwife
CSP	Country Strategy Paper
DA	District Assembly
DC	District Commissioner
DEC	District Executive Committee
DEHO	District Environmental Health Officer
DFO	District Finance Officer
DHMT	District Health Management Team
DHO	District Health Office
DHP	District Health Plan
DHS	Demographic and Health Survey
DIP	District Implementation Plan
DMO	District Medical Officer
E-DHMT	Extended District Health Management Team
EHP	Essential Health Package
EPI	Expanded Programme of Immunisation
FY	Fiscal year
GoM	Government of Malawi
HA	Health Assistant
HC	Health Centre
HCAC	Health Centre Advisory Committee
HCMC	Health Centre Management Committee
HDP	Health Development Partners
HF	Health Facility
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
HSAs	Health Surveillance Assistants
HS-POW	Health Sector Programme of Work
HSSP	Health Sector Strategic Plan
HTC	HIV testing and counselling
HZ	Health Zone (a division used in districts for planning and management purposes)
IMCI	Integrated Management of Childhood Illnesses
IMR	Infant mortality rate
IPD	In-patient department
IRS	Indoor residual spraying (Malaria programme)
IT(B)N	Insecticide treated (bed) nets
MBCH	Monkey Bay Community Hospital
MBSP	Mangochi Basic Services Programme
MCH	Maternal and Child Health
MDR-TB	Multidrug-resistant Tuberculosis
MGDS	Malawi Growth and Development Strategy
MICS	Multiple Indicator Cluster Survey

MMR	Maternal mortality rate
MNH	Maternal and Neonatal Health
MoH	Ministry of Health
MoLGRD	Ministry of Local Government and Rural Development
MSH	Management Sciences for Health (NGO)
NCST	National Commission on Science and Technology
NGO	Non-governmental organisation
NMR	Neonatal mortality rate
NSO	National Statistical Office
OFR	Obstetric Fatality Rate
OPD	Out-patient department
ORS	Oral rehydration solution
PHC	Primary health care
PMTCT	Prevention of mother to child transmission (HIV)
PoW	Programme of Work (under SWAp)
SLA	Service level agreement
STA	Senior Traditional Authority
STI	Sexually transmitted infection
SWAp	Sector Wide Approach
TA	Traditional Authority
TB	Tuberculosis
TBA	Traditional birth attendant
U1	Under one
U5	Under five
USD	US Dollars
VHC	Village Health Committee
VHR	Village Health Register
ZHSO	Zonal Health Support Office

1. Introduction

In accordance with the Country Strategy Paper (CSP) for Malawi, Iceland will support Malawi in its efforts to improve the living conditions of the poor population and to support the authorities in achieving the Millennium Development Goals (MDGs) by focusing on development issues prioritised by and agreed with the Malawian Government. The main focus during the CSP period will be on Mangochi District. Priority areas for development cooperation in Malawi have been adopted in the Strategy for Iceland's Development Cooperation (2011-2014), with Public Health as one of the priority areas.

The CSP for Malawi has established that there is an acute need for improved health services in the Mangochi District. In the area of health, ICEIDA has over a decade of experience in supporting the development of a community hospital and services in TA Nankumba. Thorough consultations on the scaling up of these activities have been conducted and the programme outlined in this document is a result of this. The main focus will be on maternal and child health which relates directly to MDGs 4 and 5 on reducing child mortality and improving maternal health respectively.

The modality provided by the CSP is a Programme Based Approach at district level providing for a "single entry point" into a complex aid management system in Malawi. The aim is to simplify procedures, minimize organizational strain, enhance local ownership and contribute to increased sustainability of programme activities.

The Public Health Programme forms a part of the Mangochi Basic Services Programme (MBSP) and will be implemented by the Mangochi District Council and funded by ICEIDA. The programme period is four years from July 2012 to June 2016.

1.1. Demographic and Socioeconomic Profile of Mangochi District

Mangochi is one of 28 districts in Malawi and has roughly 855 thousand inhabitants or 6% of Malawi's 14.4 million (estimated for 2011/12).[1] A 2004 demographic survey reported a high fertility rate in the district (7.2%) compared to the average fertility rate in Malawi (6.0%). In 2006, the population growth rate was estimated as 3.04% (Malawi 2.6%). The dependency ratio in the district is unfavourable with only 37% of the population being in the age group 20-55 years and 60% in the age group 0-19. The relative size of target groups for various public health interventions is as follows:

- 5% are children under one (U1)
- 17% are children under five (U5)
- 48% are under fifteen
- 23% are women of childbearing age
- 52% are female
- 5% expected pregnancies (deliveries).

The dominant ethnic group in Mangochi is Yao (76%). Approximately 70% of the population are Muslims (90% in Makanjira), 30% Christians. The exact opposite is true for Malawi as a whole.

Mangochi covers an area of 6,273 square kilometres. Eighty-eight percent of the population, and 91% of children under the age of five, live in rural areas. Population density is however relatively high, 136 persons per square kilometre, which is similar to average population density in Malawi. Population density is highest in TA Chowe in Mangochi/Namwera health zone (246) and lowest in STA Namabyi (91). High population density, as in Malawi, makes the organisation and management

[1] Population projections are based on the 2008 census, see Annex 8.

of health services easier than in countries with lower population density. Generally speaking, fewer health facilities are needed per population and supervision and quality assurance are easier.

In the Malawian context, the people in the Mangochi District are relatively poor. Farming is the major source of income, with tobacco being the major cash crop. The main food crops are maize, cassava and beans. The fishing industry is a major source of employment; tourism another.

1.2. Access to Health Services

Access to health services in Malawi is not universal. In recent years there has been inadequate funding for construction and maintenance of infrastructure. Even where construction of new facilities has been embarked upon many projects remain incomplete. Staffing of existing health facilities is incomplete as well.

Currently, according to the Health Sector Strategic Plan 2011 to 2016 (HSSP), Mangochi District ranks the fourth lowest in Malawi as regards access to health services. Furthermore, Mangochi is one of nine districts where access to health services decreased in the period 1999 to 2011. Populations living less than 8 km from health facility are considered to have acceptable access to health services. Twenty-seven percent of Mangochi's population lives more than 8 km from a health facility, up from 24% in 1999 (HSSP). This situation is comparable to the situation in Chikhwawa District in the South. Only three districts, Balaka, Kasungu and Chitipa, have less health services coverage. For districts with low coverage of governmental health services it is important to upgrade existing low level facilities (e.g. dispensaries), build new facilities and increase public private partnerships.

Health service providers in Malawi include the Ministry of Health (MoH), non-governmental organisations (NGO) (primarily organisations under the Christian Health Association of Malawi, CHAM) and private practitioners. CHAM is a non-profit health service provider and is the biggest NGO partner of the MoH. It provides health services and trains health workers in Malawi through its health training institutions. It owns 11 out of 16 training institutions in Malawi. CHAM facilities are mostly located in rural areas and catchment areas of CHAM and MoH health facilities rarely overlap. CHAM facilities charge user fees to cover operational costs. For most rural poor people user fees constitute a major barrier to accessing services. There is therefore gross inequality in access to those living in catchment areas of CHAM facilities. The Government heavily subsidises CHAM by financing some drugs and all local staffing costs in CHAM facilities. In order to increase access to essential health services, MoH has encouraged district health offices to sign service level agreements (SLA) with CHAM facilities to remove user fees for most vulnerable populations. SLAs mainly cover delivery of maternal and newborn care services, and involve the transfer of a fee from district health offices to a CHAM facility in exchange for the removal of user fees.

SLAs are not widely used in Mangochi. In November 2011, SLAs were only active in four (out of fifteen) CHAM facilities, namely two health centres in the Monkey Bay zone (Nkope and Malembo), one in the Mangochi zone (Koche), and one in Mulibwanji hospital in the Namwera zone. These SLAs cover maternal and neonatal health services (antenatal care visits, including anti-malarial treatment and antibiotics, delivery care, postnatal care up to six weeks post-partum and neonatal care up to four weeks). A fifth SLA, for the privately operated Maldeco Clinic in the Mangochi zone, only covered anti-retroviral treatment (for HIV/AIDS). In the financial year 2011/2012 K 17,756,240 (equivalent to almost 110,000 US dollars[2]) were budgeted to cover these SLAs.

[2] Note that during most of the finanicial year 2011/2012 the exchange rate of the US dollar was around K 167. In April 2012 the Reserve Bank of Malawi devalued the kwacha by almost 50%. This needs to be taken into account when converting between kwacha and US dollars in this document.

SLAs are important to increase access to health services for the rural population. In the four health centres with SLAs, the number of deliveries increased by 20% from 4,197 in the financial year 2009/2010 to 5,045 in the following financial year. In comparison, the total number of deliveries reported in the district increased by 7% and the number of deliveries reported in the three CHAM facilities in Makanjira zone (no SLAs) decreased by 42% from 1,389 in the 2009/2010 financial year to 807 for the following year.

The issue of SLAs is decided at district level. In Malawi, in general, there are various problems with SLAs and many districts are reluctant to enter into such agreements for various reasons. General shortage of funds, as in Mangochi, is one problem. Cross (district) border migration for high-quality services is another problem. With SLAs, the cost may fall on the wrong district if the district has facilities that attract users from other districts. However, this is not a problem in Mangochi. Patients rarely come there from other districts and patients from Mozambique who seek care in Mangochi District are charged directly.

Finally, proper planning of infrastructure expansion and development is made difficult not only by shortage of funds but also by misguided use of available funds. This is due to the fact that donors may fund infrastructure and equipment, which is then not used because the population cannot pay for the services and therefore go and seek services elsewhere. Also government projects are sometimes set in motion but not completed, or the new facilities are not equipped and or staffed and thus activities never take off. Thirdly, facilities are sometimes constructed in the "wrong" place due to pressure from donors and or people with local influence. In a nutshell the main problem is that district authorities, in particular the DHO, have little say in the planning and development of health infrastructure and services.

1.3. Current Health Situation and Trends

Many things are changing for the better in Malawi. According to a recent survey (Demographic and Health Survey, DHS, 2010, preliminary report), there is a continuous but gradual decline in fertility rate. Antenatal care from a health professional is almost universal throughout the country and does not vary much by age or residence. The same is not true for obstetric care. Nevertheless, the proportion of deliveries taking place in health facilities increased from an estimated 57% reported in a 2004 survey to 73% reported in the 2010 survey (measurements refer to a period of five years preceding a survey). Similarly, the proportion of children (12-23 months of age) who are fully vaccinated increased from 64% in 2004 to 81% in 2010. According to DHS (2010), children in rural areas are more likely to be fully vaccinated than children in urban areas. The survey reported a decline in all child mortality rates, except neonatal mortality.

The DHS (2010) suggests that Mangochi lags behind in many ways but not all. Contraceptive prevalence rate is low in Mangochi (26.6%)—the lowest in Malawi. High utilisation of antenatal care services (97.5%) is reported, but lower than average percentage of deliveries is attended by skilled health professionals (69.1%) or taking place in health facilities (67.3%). Mangochi scores below average in childhood immunisation and care seeking in childhood illnesses. The prevalence of anemia in children is relatively high and Mangochi has the highest prevalence in Malawi when it comes to anemia in women. Some causes include malaria, poor diet, and repeated pregnancies and child birth.

Mangochi's District Health Management Team (DHMT) has identified the main health problems as: high malaria incidence, high maternal and neonatal mortality, low immunisation coverage, low contraceptive utilisation, high HIV/AIDS incidence, low utilisation of services for prevention of mother to child transmission of HIV, low take-up and high drop-out rate in anti-retroviral (ARV) therapy and low tuberculosis detection.

2. National and Local Policy and Strategy in the Health Sector

With the Decentralisation Policy and Decentralisation Act the Ministry of Local Government and Rural Development (MoLGRD) is responsible for the delivery of health services at district and community levels. Human resources in the health sector, on the other hand, is the responsibility of MoH.

According to HSSP the key challenges with regards to decentralisation include weak coordination at the national level, weak oversight by MoLGRD as to what is happening on the ground and underfunding of the District Implementation Plan (DIP). As for human resources, within the health sector medical graduates are given administrative responsibilities, staff movements tend to affect services delivery at district level and staff retention is low in hard-to-reach areas.

The structure for governance at district level is presented in Annex 9. The District Health Office (DHO) comes under MoH and directly under the District Commissioner (DC). The DC on the other hand reports to MoLGRD. The District Executive Committee (DEC) is chaired by the District Commissioner and the District Health Officer is a member of this committee. Each health centre has a Health Centre Management Committee (HCMC) and a Health Centre Advisory Committee (HCAC). Village Health Committees (VHCs) are established and supervised by community health workers at village level.

Malawian health policy has, in recent years, emphasised access to so-called essential health package (EHP) services. However, in day-to-day work it has proved difficult for service providers to distinguish between essential and non-essential health services.

Overreliance on hospitals still characterises health services utilisation in Malawi. This is understandable where access to high quality primary health care services is limited. The Government of Malawi (GoM) now plans to increase equity in access to services and to strengthen urban facilities in order to decongest hospitals. Furthermore, the GoM plans to strengthen referral systems, emphasise proper referral mechanisms and charge bypass fees when these are not respected.

2.1. Institutional Framework

2.1.1. Community Level

The Village Health Committees are established and supervised by HSAs at village level. VHCs promote PHC activities through community participation and they work with HSAs to promote preventive and promotive health services such as hygiene and sanitation. The VHCs, composed of an equal number of men and women, have an important role in educating and mobilizing communities for sanitation and hygiene promotion activities and in creating a heightened community understanding among the people on how they can organize themselves to prevent disease and promote health. Secondly, they have a role in monitoring the HSA's work. It can therefore be said, that the VHCs, if properly trained and mobilized, act as bridges between the community and outside bodies, in terms of problem perception and acting as a democratic force in motivating people. However, the village health committees are often not very active, do not meet regularly, and their members have been quoted as saying “We do not really know what is our role” (ICEIDA, 2009 Baseline Study). In light of the importance of VHC in strengthening community based health services, this programme will support the training of all VHC in Mangochi.

2.1.2. Health Services Level

Mangochi District is divided into nine Traditional Areas (TAs). This programme will use a division into five health zones: Chilipa, Makanjira, Mangochi, Monkey Bay and Namwera. A health zone does not reflect a true administrative level but rather the District Health Management Team (DHMT) uses this division for the purpose of strengthening health services planning and management.

The DHO coordinates all health services in the district and its vision is to promote the health and wellbeing of all the people of Mangochi through an efficient and effective system of health care delivery. Its mission statement is to provide a comprehensive range of quality and equitable promotional, preventive, curative and rehabilitative health services. The ultimate goal of the DHO is to raise the health status of the population by reducing the incidence of illness and premature deaths in the population.

The district provides health services through a three level health care system as follows:

- Level A (primary/community): This is a *health post* which is managed by community health workers (health surveillance assistants, HSAs) who function as a link between the community and the health system and report to the health centre. A health post covers a number of villages with an average catchment population of 2,000. Each health post offers a number of services including simple diagnosis and treatment of minor ailments, health education, sanitation, hygiene, disease prevention and control (such as immunisation, growth monitoring and contact tracing). Health posts are particularly important in treatment of diarrhoea in young children. *Outreach clinics* provide services ranging from family planning, antenatal care, immunisation, growth monitoring and health education. A team of health workers (medical assistant or nurse with 2-3 HSAs) goes out and conducts a clinic in a health post, a school, a church or even under a tree. Recently, simple but permanent structures have been constructed for this purpose in a few places. An example is the Chiumba M´basulea outreach clinic. This is a simple structure, two rooms and an open area (covered). Four HSAs come there regularly to conduct clinics. Finally, the term *village health clinic* refers to HSAs conducting clinics in hard-to-reach areas. They do this in coordination with health centres.

- Level B (primary/health centre): A health centre covers a wider area constituting a number of health posts. Each centre provides managerial functions of health services in its catchment area. A health centre is designed to provide services to a population of 10 thousand but in Mangochi today this ratio is usually exceeded and a health centre commonly serves 20 thousand to 25 thousand people or even more. A health centre provides primary curative and preventive care, which includes diagnosis, treatment, immunisation and growth monitoring (U5 clinic), micronutrient supplementation, maternity and family planning services, health education, and hygiene and sanitation promotion. Not all NGO centres provide family planning services, however. Staffing level norms for a health centre specify two clinicians (that is, doctors, clinical officers or medical assistants), two nurse/midwifes and one environmental health officer/health assistant (HS-POW, Tec.Rep.No 2).

  At each health centre there is a Health Centre Advisory Committee and its composition includes the health workers from the health centre and members of the community. The HCAC ensures that communities receive the services that they expect in terms of quantity and quality through monitoring of performance of health centres in collaboration with VHCs.

- Level C: (secondary/district hospital): A district hospital provides primary level health care to the surrounding community and secondary health care to the entire district. A district hospital is a referral facility for both health centres and rural hospitals. Rural or community hospitals serve as first level of referral for health centres in defined areas and provide technical supervision to lower units.

In Mangochi there are 25 health centres (12 government-run and 13 CHAM centres), 10 government-run dispensaries (some are being up-graded to the status of health centres) and 8 established health posts, two in each health zone except Monkey Bay, where one health post is under construction. A survey conducted in May 2011, recorded 235 outreach clinics connected to health centres. Finally, 14 private clinics are registered in the district. The network of health centres in the district is presented schematically in Annex 3.

The district hospital is in Mangochi Boma. There are also three rural hospitals in the district, one in each health zone except in Chilipa zone where there is no hospital. The rural hospitals are: Monkey Bay Community Hospital (MBCH), Saint Martin's Hospital in Malindi (Makanjira zone) and Mulibwanji Hospital in Masuku (Namwera zone).

The MoH provides 57% of the district population with primary health facilities (when looking at catchment areas). This proportion is lowest in Makanjira zone (35%) and highest in Namwera zone (72%). In Chilipa the government's share is 62%, in Mangochi 60% and in Monkey Bay 52%. This indicator does not reflect the actual utilisation of services however, which varies between MoH- and CHAM facilities and among different types of services. Furthermore, the division into MoH and CHAM facilities underestimates the government's contribution to the provision of health services because of subsidies and SLAs as discussed in section 1.2 above.

2.1.3. Referral Systems and Ambulance Services

Outreach clinics, health posts and dispensaries refer patients to health centres. Health centres refer patients to rural hospitals or directly to the district hospital. The district hospital can refer patients to Zomba Hospital and from there patients may be referred to Blantyre or Lilongwe if needed.

With a vast land area and a high fertility rate the need for good ambulance services in Mangochi is obvious. Ambulance services in the district are inadequate and need to be strengthened in order to improve access to referrals. Some of the current ambulances are old and require frequent and costly maintenance. In addition, they are frequently taken out of service for lengthy periods of time due to cash shortages at the DHO.

There are ambulances in the four hospitals. A survey conducted in May 2011 listed three ambulances in good condition in CHAM centres (model 2009 or later). Two of these are in Mangochi zone (Koche HC, As Salam clinic) and one in Makanjira zone (Lulanga HC). A fourth ambulance is in Nkope HC in Monkey Bay zone (2002 model in fair condition). The survey listed three ambulances in MoH-run centres. One (1998 model) is in Namwera zone (Katuli HC) and two in Makanjira zone (Lungwena and Makanjira HCs) but both were in the DHO garage in November 2011.

2.1.4. District Health Management

Health services are managed by the DHMT. Members of the DHMT include the District Health Officer, District Environmental Health Officer, District Medical Officer, District Nursing Officer, Human Resource Management Officer, an administrator and an accountant. The organisational setup at the DHO is presented in Annex 4.

Public health and outreach activities in the district are organised into various programmes. The DHMT and programme coordinators together constitute the Extended District Health Management Team (E-DHMT). Usually, HSAs are responsible for the various programme activities at health services delivery level. All health centres in the district report to the Health Management Information System (HMIS) at the DHO. Only two out of 14 private clinics report to the HMIS (As Salam clinic in the Mangochi zone and Ngapani clinic in the Namwera zone).

The District Health Office is located at the district hospital. The members of the E-DHMT are dispersed throughout the hospital and the hospital grounds. As a result—and because there is some overlap as concerns staffing—it is sometimes difficult to disentangle district health management functions from clinical or other functions at the hospital. Uniting the E-DHMT and the various programmes and separating them physically from the hospital itself would strengthen the district health management function and rationalise the need for staff, equipment and transport.

2.1.5. National Level

The MoH, composed of different departments, is a government agency that sets the agenda for health in Malawi in collaboration with stakeholders. According to the HSSP the MoH is responsible for the development, review and enforcement of health and related policies for the health sector, spearheading sector reforms, regulating the health sector including the private sector, developing and reviewing standards, norms and management protocols for service delivery and ensuring that these are communicated to lower level institutions, planning and mobilising health resources for the health sector including allocation and management, advising other ministries, departments and agencies on health related issues, providing technical support and supervision, coordinating research, and monitoring and evaluation.

The MoH established five zonal offices in the country (North, Central West, Central East, South East and South). Whereas district health offices are situated at district hospitals the Zonal Health Support Office (ZHSOs) is independent. Mangochi is supported by the ZHSO in Zomba. The role of the ZHSO is to provide technical support to the DHMT in planning and monitoring of health services delivery at the district level and to provide supportive supervision to the DHMT. The number of districts per ZHSO varies and population size, area and economic profile of the districts vary. Allocation of funds to districts is per capita but does not take into account surface area, geography, poverty level, access to health services, quality or disease profile. As a result, the Mangochi DHO is relatively underfunded.

There are five central referral hospitals in Malawi, four general hospitals in Lilongwe, Blantyre, Zomba and Mzuzu, and a mental hospital.

2.2. Health Personnel

Due to limited wage employment opportunities Malawians migrate to major urban areas within Malawi and outside the country, predominantly to South Africa, in search of employment. This affects staffing in the health sector, which is already critically short of staff. Furthermore, donors and NGOs in Malawi compete with the government sector for personnel.

After the implementation of a six years Emergency Human Resource Plan (EHRP), the human resource situation within the health sector has improved significantly. According to HSSP, the total number of professional health-care workers increased by 53% from 2004 to 2010. The capacity of health training institutions increased and staff retention improved in the period. However, few of the priority cadres met or exceeded their targets as set in the original EHRP design. As an example the annual output of nurses only increased by 22%. Furthermore, with expanded staff establishment there are now significant vacancies among nurses, physicians, clinical officers, environmental health officers, laboratory and pharmacy technicians. Human resources challenges therefore remain both

acute and complex. Staffing level norms for almost all trained health personnel are nowhere nearly met in Malawi. The human resources situation is even worse in Mangochi and human resources is not equally distributed within the district. As is common in low-income countries, community health workers (CHWs) still play an important role in the health services, particularly in rural areas. Even in this respect Mangochi is understaffed and its CHWs insufficiently trained.

To improve retention of health care workers the MoH plans extension of housing schemes for health professionals and provision of appropriate working conditions (staff facilities, accommodation, incentive packages) for health workers in remote areas. Furthermore, it is important to ensure that health personnel with administrative and management responsibilities are appropriately equipped with information technology, hardware and software, including regularly updated anti-virus software, reliable internet and continuous power supply, and that computer training is provided for those who need it.

2.2.1. Health Surveillance Assistants

The post of Health Surveillance Assistant developed from the post of Cholera Surveillance Assistant which was created during a cholera epidemic in the 1970s. Since then the nature and scope of their activities has changed substantially.

HSAs are under the District Environmental Health Officer. Staffing level norms for HSAs are 1 per 1,000 population but these norms have not been fulfilled in Mangochi. The current ratio is 1 per 1,500 according to HMIS, best in Monkey Bay zone (1 per 1,300) and worst in Makanjira (1 per 1,900). Moreover, according to a survey conducted in May 2011, three out of ten active HSAs in primary health facilities had not received proper training (Monkey Bay zone 23%, Chilipa zone 40%, Makanjira zone 70%).

Training of HSAs consists of a 12 weeks certified course in primary health care. The curriculum has recently been updated. Each HSA is responsible for 2 to 15 villages, visiting each village once a month. They are badly equipped and their work is physically demanding in that they travel on bicycle or even on foot from village to village sometimes for up to three hours. HSAs refer patients to a health centre when necessary. They are supervised by environmental health officers.

In addition to the original role of a cholera worker—demographic surveillance, village inspection and chlorination of drinking water—HSAs perform a variety of other chores including growth monitoring, immunisation, and distribution of contraceptives. They also play a role in the prevention of child malnutrition and even treat common illnesses. They provide health education and encourage expectant mothers to attend antenatal care services and to give birth at health facilities. Recently HSAs have also been requested to collect sputum samples from adults with persistent cough (suspected tuberculosis) and to perform late-patient tracing for anti-tuberculosis and anti-retroviral treatment programmes.

HSAs are responsible for a village health register, where each and every household is registered—up to 200 households per register. The register contains on the one hand detailed demographic information by household and also—at the back—line listings by subject for the following activities: immunisations, growth monitoring, nutrition supplements and de-worming, antenatal care and births, and water and sanitation. The last section is updated when facilities, such as boreholes and latrines, are installed. The HSAs report quarterly to HMIS via health centres.

Many projects and initiatives target HSAs to perform all kinds of chores including supervision of community based “volunteers” and HSAs are frequently invited to short training courses for a variety of ad hoc initiatives while many of them have not received the basic 12 weeks’ training (see above).

The high demand on their time and attention is bound to compromise quality, efficiency and effectiveness as concerns their core responsibilities.

2.2.2. Voluntary sector

Traditionally, the idea with volunteerism in Malawi—the village health committees—was to empower the community. No incentives were involved. In recent years, various initiatives have sprung up often introduced by NGOs where "volunteers" are rewarded in some way or even paid (for example contraceptive distribution agents and growth monitoring volunteers). Some of these initiatives prove unsustainable in the long run and fade away when donors move out. A comprehensive assessment or evaluation of these initiatives is seldom performed.

2.3. Public Health Programmes

Strategies need to be supported by tactical programmes or action plans that are feasible, acceptable, and safe both to the staff who must carry them out and to the intended beneficiaries. A health programme can be defined as a formal set of procedures or a set of activities and tasks aimed at dealing with a particular problem (such as reproductive health, malaria, tuberculosis). At service delivery level these activities and tasks are integrated into the general health services. Arguably, health resources would have limited impact on populations if they were not organised into programmes.

2.3.1. Maternal and Child Health

2.3.1.1. Child survival

A 2006 Multiple Indicator Cluster Survey (MICS) reported under 5 mortality in Malawi to be 150 per 1,000 live births, infant mortality (IM) 90 and neonatal mortality (NM) 24. According to the preliminary report of DHS (2010) all rates have since decreased except NM. For the five years preceding the survey (that is, 2005 to 2010) NM was estimated to be 31 per 1,000 live births, IM 66, and U5 mortality rate 112. Looking at Mangochi, using DHS (2010) estimates (probably an underestimate) and assuming 41 thousand births, 2,700 infants die annually—at birth or in the first year of life—and 4,600 children under the age of five. If the indicators are headed in the same direction as on country level, the primary concern is neonatal mortality which, as maternal mortality, has to do with the conditions surrounding childbirth. This analysis is based on estimates of the number of births rather than on actual demographic data from village registers, the reason being that the coverage of the village register is incomplete. Village registers are kept by HSAs, but they have not all been trained for this purpose and supervision and quality assurance is incomplete. It is clear, however, that the majority of child deaths occur in the community rather than in health centres or hospitals. It can be roughly estimated, based on data from the HMIS and from quarterly environmental reports (for example 1st quarter 2011), that only 15-20% of U5 deaths in Mangochi District occur in hospitals.

The expanded programme on immunisation (EPI) is one of the pillars of a child survival strategy. A cold chain for storage and transport of vaccines is the backbone of the EPI. In Mangochi, most of the cold chain equipment is said to be old and in need of maintenance or replacement (unconfirmed). Apparently, the useful life of a fridge of the type they use (fridges made for dual power input, gas or paraffin and electricity) is five years but most of the fridges in use date back to between 1998 and 2001 (unconfirmed). As a result there are intermittent problems and breakdowns that may affect the potency of stored vaccines. Vaccines are obtained from the EPI in Blantyre (funded by GoM via UNICEF) and apparently there have not been problems with the supply of vaccines. Reported immunisation coverage in Mangochi is lower than average for Malawi. DHS (2010) estimated that

76.4% of children 12-23 months of age were fully immunised (national average 80.9%). The HMIS reported 71% immunisation coverage in Mangochi (fully immunised at 1 year) for the financial year 2010/2011 (72% in 2009/2010). HSAs play a role in immunisation.

Integrated Management of Childhood Illnesses (IMCI) is another pillar of a child survival strategy. The main causes of disease and death in young children are diarrhoea, acute respiratory infections (ARI) and malaria. Reported scores for care seeking in childhood illnesses and for use of oral rehydration therapy (ORS) for treatment of diarrhoea are low in Mangochi. Here again HSAs play a role, in sensitisation and health education in the community and in early case management and referral.

Finally, child nutrition is an important component of a child survival strategy and malnutrition is both a cause and a consequence of ill health. Mangochi scores below average in this field. The priorities under this heading are firstly—in order to prevent malnutrition—to increase the effort in health education within the communities. Here, HSAs and midwifes play a role. Second, the HSAs—when they perform growth monitoring—are supposed to detect vulnerable children and refer. Early referral to a health centre is encouraged. This activity needs to be strengthened. Not all HSAs have received basic training in this field.

2.3.1.2. Reproductive health

Three quarters of maternal deaths occur during delivery or immediately post-partum. MICS/2006 reported a maternal mortality rate (MMR) of 807/100,000 live births but recent estimates show a favourable trend in Malawi. According to HSSP maternal mortality rate decreased in the country by 31% from 984/100,000 live births in 2004 to 675 in 2010 with 25% increase in women delivering in health facilities from 57.2% in 2004 to 71.5% in 2010. The main strategies in reproductive health are family planning, antenatal care and delivery care.

2.3.1.3. Family planning

Birth spacing is an important strategy to combat high maternal and child mortality and improve the health of both women and children. With higher prevalence of contraceptive use and lower fertility rate there would also be less demand for MCH services and more space for improving the quality of services which would further benefit maternal and child health.

According to MICS/2006, the education status of mothers is low: “primary education” 55% and “none” 38%. Only 6.5% of mothers have secondary school education. Mangochi is one of the districts in Malawi with highest experience of teenage pregnancies and motherhood, 41% of teenagers have begun childbearing. This poses a risk for the mother (complications in childbirth are more common resulting in higher maternal mortality), and for the child.

Close birth spacing is also a risk for child survival. Mangochi has the lowest contraceptive prevalence rate in Malawi. MICS/2006 found that only 28% of women married or in union used contraception. DHS/2010 found that 26.6% of women of childbearing age in Mangochi used any modern method of contraception. HMIS reported 32% in the financial year 2010/2011. Injections are the most commonly used method. On the ground, one of the reasons cited for the low contraceptive prevalence rate is irregular supply of contraceptives. While a broken supply chain is undoubtedly part of the problem, it may not be the only explanation. It is safe to say that the issue is insufficiently explored.

2.3.1.4. Antenatal care

Minimum antenatal care is defined as four visits. Blood pressure measurement, urine testing for bacteria and protein should be done. Blood testing for syphilis and severe anaemia and

weight/height measurement are optional. ANC is a good opportunity for health education and information about birth spacing and contraception. Tetanus immunisation can be given and sexually transmitted infections (STI) treated. Nutrition intervention is possible, as well as HIV/AIDS care and prevention of mother to child transmission of HIV (PMTCT). Malaria treatment is very important. Pregnant women are more likely to suffer from malaria and to die from it.

Mangochi performs adequately when looking at ANC visits, on a par with the national average, but women visit relatively late in pregnancy. According to MICS/2006, 89% of pregnant women received ANC from a nurse or midwife, 6% from a doctor or a clinical officer, 2% from a traditional birth attendant (TBA) and 1% from a CHW. Only 2% of pregnant women did not receive any antenatal care. However, blood and urine samples were not always done—41% and 12% respectively—whereas blood pressure was taken for 75%, 94% had their weight measured and 80% received some malaria treatment.

The HSSP recognises that services to pregnant women are fragmented with different components run in a vertical manner. By creating a singular service of integrated ANC, a woman will be able to be tested for HIV by the same nurse who is implementing the rest of her ANC visit. Similarly, a woman delivering in a facility should have access to not only skilled birth attendants but also attendants who have been appropriately trained in PMTCT protocols, post-partum family planning and breastfeeding. By orienting clinical staff to respond comprehensively to a client's needs, it is probable that the health status of women will increase and human resources will be more efficiently utilised.

2.3.1.5. Delivery care

Ideally, all deliveries should be attended by skilled health professionals. Maternal death is the number one health priority for women in the reproductive age group. The major causes of maternal death are bleeding, prolonged and or obstructed labour, pre-eclampsia / eclampsia, sepsis, and complications of unsafe abortion. The critical interventions for preventing maternal death are ensuring attendance at delivery by a skilled birth attendant and access to emergency obstetric care for women with complications.

The national policy is to encourage women to give birth in health facilities or at least to have births attended by skilled health professionals. A skilled attendant in this case is defined as a doctor, clinical officer or medical assistant, or nurse / midwife. Traditional birth attendants (TBAs)—considered unskilled—were banned from practice in 2008. On the ground in Mangochi this policy has not yet been met with sufficient resources to prepare health facilities to meet the resulting increase in demand for obstetric services. Generally speaking the health service is insufficiently equipped to support the national policy and, even if important progress has been made, a major effort is still needed in this respect. The Government recently introduced a community midwives programme targeting hard to reach areas. To date four candidates for Mangochi are in training. Ideally this programme is aimed at replacing TBAs. It is being discussed that in the future TBAs will be asked to refer their clients to health centres against compensation for lost income. On the other hand it remains to be clarified what the ideal maternity services infrastructure looks like, that is, how many delivery- and how many maternity beds are needed and how should these services be distributed within the district. Maternity services have been expanded lately and further expansion is underway in the district. Dispensaries are being upgraded to health centre status with construction of maternity wards with as a minimum 2-3 fully equipped delivery beds in each centre. Finally, a new maternity ward will open in Mulibwanji hospital in 2012.

MICS/2006 found that less than half of the women in Mangochi (47%) delivered in a health facility. This percentage was higher in urban (74%) than in rural areas (44%). DHS (2010) (although not strictly comparable) reported 67% giving birth in health facilities. In 2009/2010 the HMIS reported 27,231 deliveries by skilled personnel in Mangochi up from 25,482 the previous year (an increase of

6.9%). This was estimated to represent 64% of all births in the district, up from 62% in the preceding year. Namwera (55%) and Makanjira (41%) lag far behind the other zones in this respect and the performance in Makanjira even deteriorated from one year to the next. Furthermore, two cases of neonatal tetanus were reported in Makanjira health centre in 2010/2011, the only such cases reported in the district.

Obstetric fatality rate (OFR) is a subset of MMR but it focuses on institutional deaths (does not take into account community deaths). OFR is calculated as a ratio of obstetric deaths per 1000 obstetric complications treated. This parameter depends on quality and completeness of reporting obstetric complications. At least 15% of all pregnancies are estimated to have emergency obstetric complications. The health service should aim at providing emergency obstetric care to all women with obstetric complications. It is recommended that Caesarean sections should not be less than 5% and not more than 15%. Falling below 5% means this service is not available even to the needy ones whereas above 15% can be interpreted as unnecessary operations. (It is important to keep in mind what the denominator is when interpreting this statistic). In Malawi, the C-section rate has gradually increased from between 2% and 3% in 1992, to 7% in 2007 (MoH 2008). In Mangochi the proportion was 6% of deliveries reported in health facilities in 2010/2011.

The HMIS reported 43 direct inpatient obstetric deaths in 2009/2010. Assuming that 300 maternal deaths occur in Mangochi District annually (42,000 live births, MMR 700), clearly the large majority of maternal deaths occur in the community. Assuming that 15,000 births take place out in the villages annually the fatality rate may be roughly ten times higher for home deliveries compared to deliveries in health facilities (or attended by skilled attendants). It must be emphasised however that this analysis is based on estimates. Due to incomplete coverage of the village health register estimates are used rather than counting on routine demographic data from the field. Here again HSAs could play an important role.

2.3.2. Control of Communicable and Vector-borne Diseases

2.3.2.1. Malaria

Malaria is a great problem in Mangochi. It is difficult to make sense of HMIS reports however, because treatment is given for presumed malaria (fever) and most reported cases are not confirmed. It is not known what percentage of presumed cases are genuine malaria cases. Nevertheless, there is little doubt that the malaria parasite takes its toll in the district.

The strategies to combat malaria are: intermittent preventive treatment for pregnant women, early case management to reduce mortality, and integrated vector management namely insecticide treated bed nets (ITN), house to house indoor residual spraying (IRS) and “larviciding” (to be introduced soon). The first two strategies depend for efficiency on sensitisation in the community and in this respect health education delivered by HSAs is important. Mangochi performs poorly on all three fronts. MICS/2006 found that the majority of young children and pregnant women and women with young children did not sleep under a mosquito net. (Women in Mangochi are known to use the mosquito nets for fishing off the shores of Lake Malawi.) Furthermore, 38% of young children had suffered from fever in the two weeks preceding the survey but only 20% received any anti-malaria drug. There is very little residual spraying in the district.

2.3.2.2. HIV/AIDS/STI

Mangochi is one of the hardest hit districts in Malawi as concerns HIV/AIDS. The district comes next after Lilongwe and Blantyre in this respect. The following factors are considered to contribute to this state of affairs:

- Fishing practices where sex is an inducement
- Tourism has promoted a prostitution industry
- Deep rooted cultural practices
- High illiteracy rate
- Immigration/migration (workers returning from towns and neighbouring countries).

The main strategies of the health sector in combating HIV/AIDS include various behavioural change initiatives, HIV testing and counselling (HTC), prevention of mother to child transmission (PMTCT), anti-retroviral therapy (ARV) and case management for sexually transmitted infections (STI).

2.3.2.3. Tuberculosis/HIV

Historically, Malawi has a good tuberculosis programme and was among the first developing countries to introduce universal short course chemotherapy (in 1985 to 1988). The country was subsequently severely hit by the HIV pandemic and unexpectedly saw a drastic increase in the number of tuberculosis cases and deaths. The National Tuberculosis Control Programme all but collapsed as it struggled to cope with the increasing case load. It then recovered and at the turn of the century longitudinal epidemiological studies in Karonga district in the North suggested that the programme was working reasonably well and that in the absence of HIV, the rate of smear positive tuberculosis would have decreased in the preceding decade. A recent article reported decrease in the number of notified cases associated with scaling up ARV treatment in Thyolo District in southern Malawi where an estimated 80% coverage of ARV treatment was reached in 2007 (Zachariah R, et al/2011).

Currently, 900 to 1,000 tuberculosis cases are reported annually in Mangochi. In the past three years there have been eight multidrug-resistant cases (MDR-TB) which reflects a relatively low level of serious drug resistance. On the other hand, about 60% of tuberculosis patients are HIV-positive.

Three main indicators are used in tuberculosis control in Malawi: diagnosis and case finding, treatment outcome (focusing on cure rate) and uptake of ARV therapy in HIV-positive tuberculosis. Performance in terms of cure rate is on target. There is less certainty as concerns case finding which is why they want to introduce active surveillance and community involvement in sputum collection. However, it is difficult to estimate how much tuberculosis there is and the case detection target is an estimate. There is low uptake of anti-retroviral treatment, with only half of HIV-positive tuberculosis patients registering for ARV treatment.

A new policy “Universal access to TB diagnosis” has been implemented in 10 health facilities. This policy dictates that community volunteers sensitise the population, take sputum samples and bring the samples to a health facility. The volunteers are supervised by HSAs. An NGO assisted this activity in 2010 and 129 “sputum points” were established. The only incentive for the volunteers was a training allowance. Since, the number of active points has decreased and was at 90 in May 2011. This initiative may prove unsustainable in the long run. On the other hand, tuberculosis services in Malawi have long since been very centralised. Furthermore, many articles have been published on sub-optimal case management in district and central hospitals in Malawi. A recent article reporting inadequacies in the diagnostic management in Zomba Hospital suggests that this is still a problem (Gawa LG, et al/2011). Carefully planned and managed decentralisation of tuberculosis services to health centres is a wise strategy. In Mangochi there is still some way to go in this respect.

2.3.2.4. Water-borne and Diarrheal diseases (including Cholera)

The main culprit here is insufficient hygiene and lack of safe water and sanitation facilities. Control measures include health education, safe water supply and sanitation (latrines). This is covered in a separate programme under the MBSP. Additional strategies during a cholera epidemic are distribution of 1% stock solution for chlorination of drinking water, safe disposal of corpses, and

disinfection. Health facilities need to have a preparedness strategy (cholera tent and beds) as they can expect to receive a large case load needing emergency hospitalisation and treatment.

2.3.3. Health Support Systems

System support refers to quality assurance. The main strategies are training of health personnel, supportive supervision of service delivery, reliable information system and a functioning pharmaceutical supply chain. Financial planning and management are also important components.

Generally speaking support systems at the district level are weak in Malawi. Strengthening the systems is one of the priorities of the MoH for the coming years. Personnel at district level require capacity building, better access to computers and internet services and improved office space.

Training of CHWs is incomplete in Mangochi but a lot of effort has been put into mending this situation recently and this effort will continue. Training for improved maternal and neonatal health care services is also planned.

The MoH recognises the need to improve supervision structures and mechanisms at all levels of the system. The current set-up in Mangochi, under the DEHO, has zonal coordinators based at the DHO and cluster supervisors based in key health facilities as presented in Annex 5. The five health zones are divided in nine clusters for this purpose. Programme specific supervision is performed by programme coordinators. There are various constraints in accomplishing regular supervision of all health facilities and personnel, including lack of transport and fuel.

While systems for monitoring and evaluation are in place, challenges exist, which impact on the effective functioning of the HMIS, such as low data quality due to infrequent data validation exercises (HSSP). Furthermore, Malawi still needs a coherent system for registering births and deaths (civil statistics). There is a potential for collecting such data through the HSAs, that is, with implementation of village health registers. If the information is to be reliable however there must be regular quality assurance.

The National Commission on Science and Technology (NCST) regulates the conduct of research in Malawi. Challenges exist, which include the absence of legal and policy frameworks to regulate research, weak coordination and monitoring of research being carried out in Malawi and poor utilisation of research findings for practice and policy formulation due to limited interactions between researchers and potential users of the information (source: HSSP).

Finally, complaints of irregular and insufficient supply of drugs and materials are common and financial planning at district level is weak. These problems are addressed in HSSP 2011-2016.

2.4. Budget and Financing

In 2003 it was estimated that the cost to meet total health expenditure in Malawi was about USD 35 per capita (Indicator Handbook). The estimated budget needed for delivery of EHP services was USD 17 per capita. At the time current expenditure on health was USD 12 per capita.

In 2004 GoM established a plan of action for the period 2004 to 2010, which was implemented using the Sector Wide Approach (SWAp). According to the HSSP, government spending on health increased from 2004/2005 to reach a high at 2009/2010 and then declined. Overall health spending was USD 5.3 per capita in fiscal year 2004/2005, 16.3 in 2008/2009 and 14.5 in 2009/2010. Donor funding rose but less was disbursed in 2008/2009 than planned. Significant amount of donor funds remain off budget and donors still fund NGOs on interventions that are not priority in the sector. Poor alignment of health development partners with financial systems is a problem. Absorption of funds at MoH headquarters, especially in infrastructure, is low due to procurement bottlenecks.

Financial management is now the responsibility of MoLGRD. The capacity to regularly track health financing sources and their use is weak. The flow of funds from central level to districts and within the districts, especially to rural health facilities, is unreliable. Strategies of direct transfer of funds to rural facilities will be explored in the coming years.

The MoH budget for the district is deposited in a hospital fund. Three signatures are needed to draw on the fund. Transfers are made against submission of work plans on a monthly basis. Apparently, this works smoothly. A fixed minimum percentage, 30 percent, is to be spent on drugs. This is insufficient when compared to the quantity of drugs needed in the district and thus often exceeded at the expense of other budget items. The rest of the budget is divided locally between all other cost items and is supposed to cover hospitals and primary care facilities, clinical care, public health and preventive services, local training and infrastructure maintenance. Salaries are not included and certain items for some programmes, such as EPI vaccines, and anti-tuberculosis and anti-retroviral drugs, are purchased centrally. It is a problematic arrangement to have a single budget and account for hospital and public health and primary care services as this is likely to result in neglect of the latter. As a rule, not only in Malawi, emergency care and hospital services are given priority over public health and primary care activities. Indeed, the HSSP suggests that the feasibility be investigated of direct transfer of funds to health centres and rural hospitals and or splitting the DHO budget in two: district hospital budget and peripheral health facilities including prevention and public health programmes.

The national target for per capita allocation for recurrent budget from MoH and partners in 2010/2011 was USD 17.5 per capita (source: SWAp PoW). According to information provided by the DFO, the MoH allocation for Mangochi was K 530 million for that year (USD 4.4 per capita, using a rate of K 140 for the USD and population figure of 853,000). For 2011/2012 the amount was K 516 million, equivalent to USD 3.1 million (using a rate of MK 165 for USD) or USD 3.65 per capita. Of this, K 12.8 million (USD 77,000) is for maintenance of buildings. This is to be used for servicing 26 government health facilities (3,000 USD per facility per year). In the previous year, this budget item received K 24 million, that is, it has been cut by half. Vehicle maintenance and running cost is heavy on the district budget, with K 88.5 million going for this budget item (equivalent to USD 500,000) namely K 1.5 million for insurance, K 35 million for maintenance, K 52 million for fuel. The current vehicle fleet is old and therefore needs frequent maintenance and repairs.

2.5. Other donors and projects in the health sector in Mangochi

There are many players on the scene in Mangochi but little oversight. The DHO hopes to make progress in this respect in coming years and bring all players to the table in order to improve planning and management in the health sector and to maximise benefits to the population.

Ongoing/planned infrastructure projects (source: May survey, field visits April/October 2011):

- Omoyo project (maternity, staff houses, etc., in Phirilongwe, Mkumba, and Namwera HCs)
- Kukalanga HC (new maternity in 2002, support via local MP)
- Malukula HC (new HC w/maternity unit, to open in Jan 2012, source of funds via local MP)
- Kapire HC (CHAM, source of funds?)
- As Salam clinic (Al-baraka Charity Fund to sponsor construction of maternity wing, etc.)
- Mase HC (CHAM, Mangochi Diocese is sponsoring construction of staff houses, etc.)
- Koche HC (CHAM, has plans for new IPD, etc., funds not identified yet)
- Lulanga HC (CHAM/Anglican Church, new HTC facility supported by WVM)
- Nkope HC (CHAM/OXFAM, minor renovation ongoing by Canadian and British volunteers)
- Mulibwanji hospital (new large maternity and EmOC unit to open in 2012)
- St Martin hospital (construction of guardian shelter supported by Local Development Fund).

NGOs working in Mangochi include (the list is not exhaustive):

- CADECOM: Community based HIV/AIDS projects in Mulibwanji and Kapire. Malaria control, including village health clinics, bed nets, indoor spraying and health education in Mase;
- MSH: Community based projects in family planning, HIV/AIDS and nutrition. Used volunteers and HSAs, promoted and provided contraceptives and built incinerators for safe waste disposal. (They have now left);
- SEED Malawi: HIV/AIDS and home based care projects in TA Chowe, Namavi, Mponda, Nankumba and Chimwala. Support the Namwera AIDS Coordinating Committee in Jalasi, Bwananyambi and Katuli, YAGAO in TA Mponda;
- Cordaid (The Netherlands). This is a Catholic Organisation for Relief and Development Aid, member of Cidse and Caritas International. They work with the Safe Motherhood Programme;
- DIGNITAS. Involved in ant-retroviral treatment (ART) covering the whole district;
- TB CARE 2 (Project Hope). Tuberculosis activities in the district;
- The Malawian Red Cross and the Icelandic Red Cross. Community based health and first aid pilot project in TA Chowe.

Ongoing or planned research activities in the district include (the list is not exhaustive):

- The Mangochi College of Medicine is doing a study on HIV/AIDS/STIs in fishing communities, including both social and biomedical components. Results are expected at the end of 2011. They are also doing a baseline study on nutrition in pregnant mothers and children. They have established research facilities in the district hospital and in various health centres throughout the district.
- A Malawian PhD student at the UK Liverpool School of Tropical Medicine is studying maternal mortality. She started preparations in Mangochi in October 2011 and first results should become available at the end of 2012 or beginning 2013. Her study is sponsored by ICEIDA.

3. Previous ICEIDA support to the Health Sector in Mangochi

ICEIDA has for the past decade supported TA Nankumba, one of the nine TAs in Mangochi. The assistance can be divided into three phases (Baseline Study ICEIDA 2009). In Phase-1 (2000 to 2003) there was a focus on infrastructure strengthening: constructions at Monkey Bay Community Hospital—which is located 45 minutes' drive from the district hospital—and investment in communication with peripheral facilities. In Phase-2 (2004 to 2008) the focus was on strengthening services in MBCH, Nankumba Health Centre, outreach clinics and community based services. In this period ICEIDA also assumed some of the running costs (fuel, drugs, and such). The Project Document for Phase-3, for the period 2009 to 2011, stipulates further construction at MBCH and outreach facilities in its catchment area including upgrading of Chilonga dispensary to health centre level with a maternity ward, construction of a health post at Kanyenga and construction of staff houses. This project came to an end in 2011. During the years ICEIDA has also funded training and scholarships for health personnel, and purchased bicycles, motorbikes and vehicles. Finally, small research projects have been funded (results not published).

In the past three years ICEIDA's input in the Monkey Bay project has been: USD 500 thousand in 2009, USD 550 thousand in 2010, and USD 750 thousand in 2011. In 2011 funding primarily went to pay for construction at MBCH, Nankumba and Chilonga. On average, annual ICEIDA support has been of the order of USD 600 thousand which is equivalent to USD 4.9 per capita (using a population projection of 122,878 in TA Nankumba for 2009/2010).

In many ways Monkey Bay health zone has been privileged and not only by the presence of ICEIDA. CHAM centres offer services to 50% of the population in the area which is more than in any other health zone in the district. Furthermore, the DHO has signed SLAs with CHAM health centres in the Monkey Bay zone, which is not the case in Chilipa, Namwera and Makanjira zones. The Monkey Bay zone is generously staffed when looking at the ratio of HSAs to population, 1/1,300, which is the most favourable ratio in the district. Finally, a number of private clinics operate in the area. All this has resulted in the Monkey Bay zone presently enjoying the best health infrastructure in the district, and presumably better health services resulting in better outcomes.

There are many lessons from the past as concerns enthusiastic plans in Mangochi, not only in ICEIDA's MBCH project. Generally speaking, CHAM infrastructure is underutilised in the district, even if staff, drugs and supervision are covered by the MoH. There are few SLAs and in spite of service fees and grants many of the CHAM facilities are struggling to maintain this infrastructure. In Mbalama, a government site, the Malawi Social Action Fund (MaSAF) sponsored the construction of a health post in 2001. Today, ten years later, this health post is in very bad condition and serves as an example that investment in infrastructure is lost if it is not up to standard (building regulations, materials, etc.) and not followed by investment in personnel, activities and maintenance. Thus, it is important to plan realistically.

With the future collaboration in mind, some components of ICEIDA's previous involvement in TA Nankumba deserve particular attention. Of note are the recent renovations in Chilonga dispensary that allowed upgrading of this facility to health centre status with a maternity unit. In Malawi, a dispensary was originally "OPD plus pharmacy" but recently there is a lot of pressure to upgrade those dispensaries that are strategically located and serve large populations. It is important to document the progress in service delivery in Chilonga and any problems that might emerge in order to learn lessons and use the experience to guide development in other health zones. This is best done by regular quality assurance using HMIS data sources and indicators and by comparisons with other sites.

4 Background and Rationale

The Government of Malawi recognises that a healthy population is necessary to achieve sustainable economic growth and development. In 2004, the Government established a plan of action for the period 2004 to 2010, which was implemented using the Sector Wide Approach. In the Malawi Growth and Development Strategy for 2011 to 2016 (MGDS-II), the Government will focus attention on the provision of an essential health package (EHP) and other health services, which aim at making essential health services available to every Malawian. The Health Sector will direct its efforts in implementing programmes that target public health, sanitation, malaria, and HIV and AIDS management.

4.1. The Health Sector Strategic Plan: Moving towards Equity and Quality

While sustaining the gains made in 2004 to 2009, in the HSSP the Government has taken further measures to address the burden of disease by placing more emphasis on public health interventions including but not limited to health promotion, disease prevention and increasing community participation. The main priority will be interventions that are cost effective and expansion of services to the under-served. The Government recognises that there are still a number of factors that need to be addressed that negatively impact on the health of Malawians, namely availability and quality of health services, access to health services and environmental and behavioural issues.

The HSSP intends to achieve, among others, the following key outcomes and outputs:

Increased coverage of high quality EHP services

- Health facilities including staff houses constructed and rehabilitated especially in under-served communities
- Service Level Agreements implemented in identified areas
- Emergency transport provided

Strengthened performance of the health system to support delivery of EHP services

- Skilled human resource for health trained, recruited and retained in the health sector
- Quality medical equipment provided and maintained
- Essential medicines and supplies made available all the time
- Monitoring, evaluation and research activities strengthened
- Appropriate standards, guidelines, operating procedures, protocols and legislative frameworks developed

Reduced risk factors to health

- Public policies that impact on health advocated
- Healthy settings programmes (workplaces, schools and communities) and water, sanitation and food safety interventions implemented
- Vector control strategies strengthened and implemented
- Advocating for healthy lifestyles and behaviours
- Disaster risk management strengthened

Improve equity and efficiency in the delivery of quality EHP services

- Health financing strategies developed
- Resource allocation formula reviewed.

4.1.1. The District Health Plan

The following problems and objectives are among those identified by the DHMT in Mangochi in preparation for the fiscal year 2011/2012.

Problem:	Objectives of the DHP (fiscal year 2011/2012):
High maternal and neonatal mortality	Increase percentage of deliveries attended by skilled personnel from 64% to 70%
Low immunisation coverage	Increase "U1 fully immunised" from 72% to 80%
Very low contraceptive prevalence rate	Increase contraceptive utilisation from 42% to 44%
Low utilisation of services for prevention of mother to child transmission of HIV	Increase the proportion of pregnant mothers tested for HIV from 66% to 70%

Table 1. Problems and objectives identified the DHMT in Mangochi, fiscal year 2011/2012

The overall objective of the health sector is to improve access to and utilisation of health services in the district. To achieve this and the specific objectives (above) which are intrinsically linked to improvement of health status the sector will undertake the following strategies:

- Increase access to the EHP. This will focus on the provision of a basic package of promotive, preventive, curative and rehabilitative health services practically and scientifically deemed to have most significant impact on the health status of the community. These services will include measures to promote clean water and sanitation, child immunisation, family planning, safe motherhood, nutrition, and prevention of malaria, HIV/AIDS, diarrheal diseases, acute respiratory infections and tuberculosis. The provision of these services will be backed up by technical and support services.
- Strengthen community participation in health issues. Communities will be mobilised to take a leading role on issues relating to their health.
- Capacity building. Health workers and community structures will undergo relevant training and orientation necessary for the provision and utilisation of high quality health services.
- Partnerships. The sector will enhance partnership with various partners within and outside the district in order to rationalise health financing management and improve the delivery of health services in light of limited resources.
- Monitoring and evaluation. The DHMT shall meet every month to assess performance of implementation. Each health facility shall conduct monthly HMIS review. Each health facility shall be visited once every three months by the E-DHMT as part of supportive supervision. All health facilities shall submit monthly and quarterly reports using the standardised HMIS tools. Quarterly HMIS/DIP review meetings shall be held with the E-DHMT and partners to assess the progress made and to share experiences. These reviews shall further determine strengths and challenges and whether any modification might be needed in strategies or plans in order to achieve objectives. Quarterly HMIS reviews at health cluster level will be conducted to provide an opportunity for the personnel in all health facilities within a cluster to compare performance, share experiences and develop realistic plans towards improving performance.
- Health promotion.

The main outputs identified by the District Health Plan are improved health infrastructure and increased access to and utilisation of health services in priority areas namely, immunisation, reproductive health, HIV/AIDS/STI, malaria and tuberculosis.

4.2. Programme Strategy and Priority Areas

The present programme is based on the priorities and strategies identified by national and local health authorities in preparation for the current planning cycle (2011 to 2016). The broader focus of this programme is on improvement of infrastructure for health facilities, expansion of infrastructure for high impact, quality reproductive health services, strengthening of health support and community health service delivery systems, and building and strengthening human resource capacity, with a particular focus on health services organisation and management.

The programme addresses the following priorities identified in MGDS-II, some directly and others indirectly by strengthening infrastructure and human resources:

Public health
- Strengthening community health service delivery
- Strengthening health support systems
- Improving availability and access to maternal care services
- Child survival

Sanitation
- Water supply and sanitation in health facilities
- Safe waste disposal in health facilities

Malaria
- Developing capacity of community health workers in case management

HIV and AIDS management
- Promoting HIV testing and counselling
- Promoting prevention of mother to child transmission.

The programme takes note of the intentions of the HSSP to prioritise expansion of services to the under-served and aims to improve not only access to health services but also improve the quality of health services and the working environment of health personnel. The partnership will emphasise addressing the following among the key outcomes and outputs listed in the HSSP:

Increased coverage of high quality EHP services
- Health facilities constructed and rehabilitated in under-served communities
- Emergency transport provided

Strengthened performance of support systems
- Human resources trained, recruited and retained in the health sector
- Quality medical equipment provided and maintained
- Monitoring, evaluation and research activities strengthened

Reduced risk factors to health
- Water and sanitation interventions implemented in communities (improve access to safe drinking water and proper sanitation and conduct promotional activities for water hygiene, sanitation and hand washing) (Mangochi ICEIDA partnership in Water and Sanitation)
- Improved hygiene and sanitation facilities in schools (Mangochi ICEIDA partnership in Education)

The partnership will put particular emphasis on maternal and child health. Millennium development goals number 4 and 5 provide the background for action in this field. The partnership will not target communicable disease control programmes specifically. Such programmes as a rule receive “vertical” support (e.g. malaria, HIV/AIDS and tuberculosis activities).

4.3. Target groups and Stakeholders

The primary target group is the population of Mangochi District with priority given to the poorest communities in rural areas. The community at large will benefit from improved access and better health services, particularly women, children and families.

Secondary beneficiaries will be field workers, community development committees and various staff at the DHO through participation in programme activities, training courses, etc. which is expected to increase their capacity to deliver services. The community and health personnel in Mangochi, including district-, facility-, and community levels are all targeted and will participate in the work. Three categories of health personnel are specifically targeted: health surveillance assistants (HSAs), nurse/midwifes, and public health managers at district level (DHMT and E-DHMT).

As the role and capabilities of the HSAs is regarded highly critical for the implementation of activities under the current programme, and they assume a key role in the implementation of improved access to sanitation under the Water and Sanitation Programme, the implementation of activities relying on HSAs will be assessed regularly, in order to determine whether additional support is required to strengthen their ability to carry out their work.[3]

The main stakeholders in the health sector in Mangochi are local communities, service providers, and institutions, organisations and individuals involved in education of health professionals and research.

Main stakeholders among service providers, apart from the DHO, include the CHAM network, and various local, national and international NGOs (their activities are not well defined and for the most part poorly coordinated). Finally, there are private (for-profit) providers.

4.4. Cross Cutting Issues

Throughout the MBSP, two cross cutting issues, gender and environment, will be systematically considered and indicators used to measure progress towards gender equality, as stipulated in the master programme document. Reproductive health is one of the main focus of this programme and indicators pertaining to that are considered important to measure progress towards gender equality.

[3] The monitoring of activities performed by HSAs will include: Number of VHCs trained in PHC, percentace of children fully immunized, as well as indicators from the Water and Sanitation Programme, number of villages triggered in CLTS, and the percentage of population with access to improved sanitation.

5 The Health Programme

5.1. Overall Objective

ICEIDA will join GoM and the Mangochi DHO in their efforts to improve the quality of life of the people of Mangochi by reducing the risk of ill health and occurrence of premature deaths thereby contributing to social and economic development. In line with the MBSP, the overall objective of the programme is:

To assist the Government of Malawi and the Mangochi District Council to improve living standards in the rural communities in Mangochi District.

5.2. Immediate Objective (Outcome)

This programme specifically aims to reduce maternal and child mortality in Mangochi District. The immediate objective is:

Increased availability, access and utilisation of high impact, quality maternal and child health services in Mangochi District.

5.3. Expected Results (Outputs)

1. Improved health services infrastructure

1.1. General infrastructure in the network of the MoH health centres is strengthened

- 1.1.1. Safe water supply installed in at least 13 HCs (Annex 6. p.2 for proposed sites)
- 1.1.2. Sanitation (latrines) installed in at least 13 HCs (Annex 6. p.3 for proposed sites
- 1.1.3. Electricity and power supply installed in at least 19 HCs (Annex 6. p.5 for proposed sites)
- 1.1.4. At least 10 placenta pits and 10 incinerators constructed in health facilities (Annex 6. p.4 for proposed sites)
- 1.1.5. General maintenance done in at least 13 health facilities
- 1.1.6. Buildings and equipment maintained (maintenance fund)

1.2. Improved infrastructure and equipment in maternal and child health services in HCs

- 1.2.1. At least 4 maternity wards constructed in rural areas (Annex 7 for proposed sites)
- 1.2.2. Maternity ward constructed at the Mangochi District Hospital
- 1.2.3. Beds and equipment provided for 6 maternity wards (Annex 7 for proposed sites) (See section on Input regarding definition of equipment)
- 1.2.4. At least 11 Waiting homes constructed (Annex 7 for proposed sites)
- 1.2.5. At least 10 Staff houses constructed (Annex 7 for proposed sites)
- 1.2.6. At least 10 Health posts constructed and provided with electricity
- 1.2.7. At least 20 vaccine fridges provided at health posts and other health centres (Annex 7 for proposed sites)
- 1.2.8. At least 5 health facilities provided with furniture

2. Increased coverage of high impact, quality maternal and child health services

2.1 Improved referral services

- 2.1.1. At least 5 ambulances purchased and in operation with operational guidelines in place

2.1.2. At least 8 bicycle ambulances purchased and in operation with operational guidelines in place

2.1.3. At least 5 motorcycle ambulances purchased and in operation with operational guidelines in place

2.1.4. A Feasibility assessment on the effective communication strategy between health facilities and between the facilities and the ambulance services has been done and implemented

2.2. Strengthened Community based health services

2.2.1. At least 35 HSAs trained in initial training (12 week course)

2.2.2. At least 550 bicycles provided for HSAs

2.2.3. At least 8 community midwives trained

2.2.4. HSAs provided with required equipment

2.2.5. At least 874 Village Health Committees trained in Primary Health Care

2.2.6. At least 30 Health Advisory Committees trained on their roles and responsibilities.

3. Improved capacity of the health system to deliver services

3.1. Improved working conditions for public health (PH) support staff at the DHO

3.1.1 Public Health Office at DHO renovated

3.1.2. Public Health office equipped

3.1.3. One (1) 4x4 vehicle for supervision for Public Health Office provided and operational

3.1.4. At least 12 motorcycles for supervision for Public Health Office purchased and operational.

3.2 Institutional capacity strengthened at the DHO

3.2.1. At least 10 staff trained in accordance with the needs assessment with scholarships from the education fund

3.2.2 At least 12 research projects funded and research findings disseminated to relevant parties.

3.2.3 Computer lab established at the hospital

3.3 Improved/strengthened health management information system

3.3.1 Effective internet service and computers installed at the DHO and in 4 health zones (5 total)

3.3.2 Capacity building in HMIS for coordinators and health centre management teams

3.3.3 Village Health Registers fully institutionalized in the district (see Annex 12).

The Logical Framework Matrix is presented in Annex 1. The framework presented in Annex 1 may need to be adjusted as the programme develops. Such changes need to discussed and approved at the bi-annual meetings specified in Article 7 of the Partnership Agreement, and further approved by the ICEDA Head Office.

5.4. Activities and workplan

A list of activities and workplan for 2012-2016 is presented in Annex 1, together with the Logical Framework Matrix.

5.5. Inputs

The inputs of different parties are stipulated in Articles 3-5 in the tripartite partnership agreement.

ICEIDA will fund investment in construction, equipment and capacity building but for the most part running costs and consumables will be the responsibility of GoM. All salaries of local health personnel (including trainers) will be paid by GoM. Funding of training courses will take note of ICEIDA's policy on the subject (see below). ICEIDA will only fund the construction of new infrastructure if sustainability is guaranteed by GoM, that is, allocation of additional funds for staffing, running cost and maintenance must be guaranteed.

Expected inputs include: Constructors contracts, constructing materials, office equipment (including hardware, software, printers, internet, furniture), basic equipment for maternity wards (see below), vehicles, motorcycles, bicycles, funding of training and quality assurance programmes, funding of contingency, education and research funds.

The District Council shall be responsible for implementing the Programme in the most efficient manner and in compliance with existing national laws and policies. The District Council shall have the overall responsibility for the planning, implementation and reporting of the Programme. The District Council shall provide staff and other resources as appropriate. The District Council shall ensure that the funding is used according to approved work plans and budgets. The District Council shall promptly inform ICEIDA and the Ministry of Local Government and Rural Development of any circumstances that interfere or threaten to interfere with the successful implementation of the Programme.

5.5.1. Construction

Detailed and realistic construction plans need to be made for each site where infrastructure is concerned. It must be kept in mind that these are rural centres made to provide services to a rural population. Results are measured by looking at the output and outcome of the services provided not the size and shape of the buildings. All buildings and construction work must adhere to building codes and regulations approved by the relevant authorities.

5.5.2. Equipment

The procurement of equipment for Health facilities and Maternity Wards will be based on specifications defined in The Standard Equipment List for typical district and community Hospital and Health Centre with Generic Specifications for some common and general equipment , published by the Ministry of Health in March 2000

5.5.3. Training

In order for ICEIDA to fund training activities, the following criteria apply:

1. The training scheme is a part of an annual work plan, proposed and budgeted for in a transparent manner by DHMT.

2. Training is based on needs assessments and has practical applications. At all times certified formal training is preferred to ad hoc schemes.

3. Proposal must be presented with rationale and agenda, budget and work plan, reference to available training materials and availability of certified facilitators and number of beneficiaries.

4. ICEIDA only funds workshops, seminars and training schemes that apply the agreed guidelines of the international donor group in Malawi. This covers the cost for venues (with prior agreement), accommodation and meals if necessary, training materials (for facilitators and trainees) and transport if necessary. External facilitators can be hired but facilitating allowances for civil servants are not supported.

5. ICEIDA does not pay sitting allowance and does not pay for incidentals. A donor harmonised allowances scheme has been agreed to by all major donors, including ICEIDA. The scheme reflects maximum allowed rates and each donor can adjust this scheme downwards according to own criteria.

5.5.4. Input to funds operating under the progamme

Education Fund: This fund will sponsor candidates both for pre-service and in-service training The selection of candidates will be the responsibility of a committee composed of members from the District Council, the zonal health office, the DHMT and ICEIDA. Candidates will sign a bond of 3 years with the District Council. Operational procedures for the education fund, and the training bond are enclosed in Annex 11.

Research Fund: This fund will sponsor operational and other research concerned with questions that are relevant to the work program under the partnership (e.g. access to health care, reproductive health, maternal and neonatal care, quality assurance / improvement schemes, CHW programs, community participation, etc.). This fund will be open for health staff in the district. Applications will be reviewed by a committee. Operational procedures for the district are enclosed in Annex 11.

Maintenance fund: In order to protect investment in infrastructure and strengthen capacity of the maintenance office at the DHO a maintenance fund for small repairs and maintenance will be operated. The aim of the fund is to improve spare parts procurement and management and to encourage regular and comprehensive preventive and corrective maintenance.

5.6. Indicators and Means of Verification

It is difficult to justify that any additional burden should be placed on health personnel for the purpose of monitoring and evaluating donor assistance. Donor activities should assist local authorities in strengthening existing monitoring and evaluation strategies. In recent years considerable effort has been made in terms of establishing and defining indicators for monitoring and evaluation purposes (Indicators Handbook, 2003) and progress has been made in this respect in Malawi as well as in performance as measured by the indictors that are used.

The programme makes use of the indicators that are already used in the district (and or in the country). All indicators proposed for this programme are listed in the Logical Framework Matrix in Annex 1, and key indicators are outlined in table 2 below. These indicators use data that is available from HMIS, routine reports or regular surveys that are being carried out anyway. Any additional indicators proposed are either easily verifiable, reported as part of the programme (e.g. construction and training) or depend on data from rapid assessments conducted as part of the ICEIDA support (such as the rapid infrastructure assessment conducted in May 2011).

Indicator	Data Source	Baseline 2011-12	Target 2015-16
Overall Objective			
Maternal mortality ratio (not available at district level)	NSO	675/100000	155/100000
Neonatal Mortality rate	HMIS	36/1000	20/1000
Infant mortality rate in Mangochi district	HMIS	82/1000	45/1000
Under five mortality rate (of < 5 population) in Mangochi district	HMIS	136/1000	70/1000
Immediate Objective (Outcome)			
Pregnant women (%) starting antenatal care in first trimester of pregnancy	HMIS	9.6%	20%
Deliveries (%) attended by skilled health workers	HMIS	68%	80%
Proportion of under 1 children fully immunised	HMIS	69%	85%
Pregnant women tested for HIV	HMIS	68%	85%
Output			
Health centres (%) with electricity, improved sanitation and water	HMIS	31%	100%
Health centres (%) with safe waste disposal	HMIS	54%	80%
Fully equipped maternity wards (% of disrict target, 16)	HMIS	25%	56%
Maternity ward at MDH constructed and equipped	HMIS		Completed
Proportion of district health zone having running ambulances	HMIS	40%	100%
Proportion of HSAs trained	HMIS	94%	100%
Proportion of HSAs with required transport and equipment		0%	100%
% of health facilities receiving integrated supervision quarterly and written feedback provided	HMIS	0	75%
% of health facilities reporting timely	HMIS	78%	100%
Number of health workers who had undergone certified trainings	HMIS	0	10
Proportion of official villages with updated village health registers	HMIS	10%	100%
Proportion of health zones with effective internet service	HMIS	40%	80%
LOCAL AND CENTRAL POLITICAL COMMITMENT AND SUSTAINABILITY			
Per capita allocation from MoH HQ received in Mangochi (annual)	HMIS	USD 3.65	USD 5.0
Per capita allocation from ICEIDA (average annual figure in 2012 to 2016)	HMIS	-	USD 1.8

Table 2. Key performance indicators at the Mangochi District level. The data source for the impact indicators have been sourced from the Demographic Health Survey that was conducted in 2008 by the National Statistical Office. The data source for the outcome indicators(Specific objectives and Expected results) has been obtained from the routine HMIS data that is collected from Health Facilities and analysed in the district on a quarterly basis.

6 Expected Impact and Sustainability

In the context of development assistance, sustainability can be defined as a system´s ability to produce benefits sufficiently valued by users and stakeholders to ensure resources to continue the activities. Sustainability demands that interventions take note of local settings in terms of both appropriate technology and competing priorities.

At the end of the partnership there will be better health infrastructure, facilities, equipment and vehicles, functional community health structures and a pool of trained health workers. Subsequently there will be better health status of the population as measured by impact indicators such as maternal, under five and infant mortality rates. Through training and equipping the HSAs it is expected that access to maternal and child health services in rural areas will increase in the communities, measured by indicators such as births attended by qualified health workers, immunisation rates and HIV testing. Health information and data collected will have improved as a result of strengthened health management information systems. Subsequently, there will be better

access to information for planning and financing. On the other hand, in addition to routine running costs there will be a need for sufficient budget allocation for regular maintenance of buildings, structures, equipment and quality improvement programmes and for a training programme to maintain performance of trained personnel and keep up with worker attrition rate.

Sustainability should be aided by the fact that ICEIDA's contribution respects strategies and priorities put forward in the MGDS-II and HSSP 2011 to 2016. Several indicators can be proposed to monitor or predict sustainability, e.g. staffing, budget allocation to the District and drug supply. One additional indicator is proposed to monitor commitment to improving universal access and quality of maternity services namely the number of SLAs entered into with CHAM facilities.

7 Risks and Mitigations

A number of internal and external risks may impede the implementation of the Programme or have a negative influence on the achievement of results. These can be mitigated with planning and vigorous monitoring efforts. The risks and mitigation efforts are outlined in chapter 5 of the Malawi Country Strategy Paper.

Further risk factors have been identified in relation to this programme, as they relate to the provision and management of health services.

7.1. Finances

Lower per capita budget allocations to the health sector in Mangochi from the central government could impact negatively on the progress of working towards improved health indicators proposed for this programme.

Weak financial management at district level could compromise progress of the work. Measures are being taken by GoM to improve this aspect and encouraging changes are already felt at district level.

7.2. Supply of drugs and materials

Irregular supply of drugs and materials would adversely affect quality of care and compromise results of interventions under the partnership. HSSP contains strategies to address the shortage of essential medicines and supplies in health facilities. This will be monitored by DHMT during the partnership period.

7.3. Infrastructure

It is impossible to predict accurately at this point in time how things will develop in 2012 to 2016 as regards infrastructure. Many players are currently on the scene and new ones may arrive. GoM/MoH may have overlapping or different plans to improve infrastructure and needs and priorities may change. Furthermore, interventions may need to be aligned with infrastructure targets. Given the resource shortage, the target is not always 100% coverage. Certain flexibility is called for when implementation starts and collaboration of all stakeholders is crucial.

Construction time at each building site must be kept to a minimum because service delivery usually suffers while renovations are underway. Low performance of contractors in infrastructure could affect the programme.

The matter of access to health services is complex and building more and more health facilities will not necessarily solve the problems. External factors, such as road construction and transport are also

important. Physical access (distance, transport, fuel, roads) influences use of health facilities particularly in rural areas. This also affects the utilisation and efficiency of ambulance services.

7.4. Human resources

Shortage of human resource, low salaries and lack of opportunities for continuing education and or promotion can result in low retention of well trained and capable health personnel. Shortage or high turnover of staff at district and facility levels would affect the work and the results.

The role of health surveillance assistants (HSAs) is not clearly defined and currently they are overloaded with responsibilities. This could compromise the impact of the planned training and support to HSAs. MoH recognises this problem and the need to review and standardise policy on the scope of work for HSAs (HSSP). Drop-out rate among HSAs would compromise progress of the programme. This is currently being addressed by the Ministry of Health in partnership with SSDI Support Service Delivery Integration. As outlined above, indicators which reflect the implementation of activities carried out by the HSAs will be monitored in this programme. Should concerns arise regarding performance, the bi-annual meeting must discuss whether additional efforts are required by the programme to support the work and capacity of the HSAs.

8 Organisation and management

The Mangochi District Council has the responsibility of improving services in the district and will lead the programme work. This means that the District's annual work plans, financial management system and monitoring and evaluation system will be used to the fullest extent possible.

The organisation and management of the programme is stipulated in the MBSP Programme Document, chapter 3: Programme management and oversight procedures.

The implementing office in the Mangochi ICEIDA Partnership in Health programme is the District Health Office.

8.1. Monitoring of programme activities and outputs

The District Coordination Team (DCT) will supervise and monitor progress of the programme. The Ministry of Local Government and Rural Development is responsible for monitoring of the programme at the central government level. Its National Local Government Finance Committee (NLGFC) will include this programme in its normal work with the Mangochi District Council.

There are sufficient monitoring mechanisms in place in Mangochi to monitor the proposed activities (see Monitoring and Evaluation under The District Health Plan above). However, HSSP recognises that in many cases reviews are merely undertaken as fulfilment of activity plans more than as an input into systematic planning or process. There is also limited utilisation of data at point of source to inform programming and the quality of data seems to be of low quality.

The best way to improve the HMIS is to use it. The existing mechanisms can easily accommodate monitoring of the activities under the partnership because they are all in line with the District Health Plan and will be part of the District Implementation Plan and by and large use the same or similar indicators. Reports and review meetings, where data are summarised, interpreted and discussed, will be supported under the partnership and used for monitoring and evaluating progress within the programme. To summarise:

- Quarterly DHMT meetings and HMIS reviews at DHO
- Health facilities submit monthly and quarterly reports to HMIS
- Quarterly supervision by E-DHMT to health facilities
- Quarterly HMIS review at zonal and or cluster level
- Quarterly HMIS/DIP meetings with E-DHMT and partners at district level.

The DCT and ICEIDA will jointly formulate a monitoring and evaluation plan during the first half of 2013, based on the Logframe Matrix in Annex 1, which shall guide the monitoring of progress in the programme. The programme shall aim to support the DHO and the DCT in implementing monitoring procedures.

8.2. Project Costs

The total funding contribution from ICEIDA in the health programme is expected to be in the range of 6 million US Dollars. At the time of planning this programme the per capita contribution from the Government in Mangochi was estimated around USD 3,65, using a currency exchange rate of MKW/USD 165, but with the current exchange rate this figure is lower in US dollars. ICEIDA funding will add around USD 1,8 per capita on a yearly basis, using a currency rate of MKW/USD 333.

A budget for the programme is enclosed in Annex 2. Due to recent developments in the foreign exchange market in Malawi, there is considerable uncertainty regarding the cost of many activities in the programme. A detailed budget will be worked out annually, in line with the District Implementation Plan (DIP), for approval at the March bi-annual meeting specified in Article 7 of the Partnership Agreement.

The ICEIDA Country Strategy Paper for Malawi 2012-2016 proposes scaling up of funding during the Programme period contingent upon success in implementation from one year to the next. Subject to performance and delivery of results as well as available funding, within the overall ICEIDA estimated funding to Malawi, targets may be adjusted accordingly.

8.3. Financial management and disbursement of funds

The financial management and disbursement of funds is subject to the tripartite partnership agreement as specified in Article 6 and further stipulated in chapter 4 of the MBSP Master Document.

During the implementation, the District Council and the District Health Office will follow all government regulations and procedures for the management and monitoring of public funds.

The health programme shall have a separate ledger in the books of the District Development Fund which can be accessed by ICEIDA's representatives at all times.

8.4. Procurement

All procurement of goods and services under the programme will be undertaken by the District Council and shall follow international competitive bidding procedures. The procedures shall as much as possible be governed by the Public Procurement Act (2003) and any subsequent procurement guidelines that may be provided by the Government of Malawi, through the Office of the Director of Public Procurement.

ICEIDA must give its "no-objection" on tender documents, before a tender is advertised. In addition, ICEIDA's "no-objection" on bid evaluation reports is required before contracts are awarded to bidders. The District Council shall furnish ICEIDA with all relevant information on its procurement practices and actions taken, and provide access to all related records and documents. ICEIDA may require access to information even during the stage in the procurement procedure when it is restricted to the officers performing the procurement. Restrictions on such information shall be respected until the information can be made public without any risk of detriment to the result of the procurement

A procurement plan for the programme is enclosed in Annex 10.

8.5. Reporting and reviews

As indicated in Article 7 of the tripartite Partnership Agreement, bi-annual meetings will be held, in March and October each year, to (i) discuss progress, (ii) discuss and approve work plans and budgets, and (iii) discuss any issues of special concern for the implementation of the programme and determine action if required.

The District Council shall submit quarterly progress reports in accordance with Annex II of the Partnership agreement between the Government of the Republic of Malawi and the Icelandic International Development Agency. Furthermore, regular review visits by ICEIDA will be made for progress evaluation to capture eventual need for changes or adaptations of plans. The visits will be organised to coincide with quarterly HMIS/DIP meetings between E-DHMT and partners and if and when possible (at least once a year) with quarterly supervisory visit to Mangochi District from the Zonal Health Support Office. Meetings with DC, DHO and the DHMT, and visits to selected health centres should always be part of the review visits.

The DHO will conduct a midyear stakeholders review before planning for the next year's activities. This is to determine whether new partners have come in or gone out of the district who are implementing similar activities. The work plan will need to be reviewed according to the outcome of this review meeting.

After the first year, the operating guidelines for the education fund and the research fund will be reviewed , in terms of experience and effectiveness.

The general reporting mechanisms for the MBSP are further stipulated in chapter 3.4 of the Master Document.

8.6. External evaluations

An external mid-term review will be organized in June 2014. Subsequently, the results will be discussed at the bi-annual partnership meeting and decisions taken to address any issues or concerns such a review may define. The ICEIDA head office will also provide input to such discussions as stipulated in ICEIDA's operational guidelines.

A final evaluation will be organized in July 2016. Both mid-term and final evaluations will be undertaken by independent external consultants. Funding for the mid-term review shall be covered by programme funds while the final evaluation will be funded separately by ICEIDA.

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Annex 1: Logical Framework Matrix and Work Plan

Narrative Summary	Objectively Verifiable Indicators	Sources and MOV	Assumptions
Overall Objective (Goal) MBSP			
To assist the Government of Malawi and the Mangochi District Council to improve living standards in the rural communities in Mangochi District.	• Maternal mortality ratio (national) • Infant mortality rate • Under five mortality rate	NSO HMIS HMIS	
Immediate Objective (Outcome)			
Increased availability, access and utilisation of high impact, quality maternal and child health services in Mangochi District.	• Pregnant women (%) starting ANC in first trimester of pregnancy • Proportion of births attended by skilled health personnel (MDG indicator 5.2) • Percentage of under 1 children fully immunized • Pregnant women tested for HIV	HMIS HMIS HMIS HMIS	• Sufficient funding • Women willing and able to use the services. • Sufficient supply of drugs and materials. • Fuel (ambulances and vehicles) • Interventions accepted by the community and leaders.
Expected Results (Outputs)			**(Output to Outcome)**
1. Improved health services infrastructure			
1.1.General infrastructure in the network of the MoH health centres is strengthened			
1.1.1. Safe water supply installed in at least 13 HCs (Annex 6. P.2 for proposed sites)	• Number of HCs with own water supply	HMIS/Survey	• Adequate absorption capacity at DHO and DC. • Good collaboration with all stakeholders. • Timely evaluation of tenders • Contractors available and reliable. • Construction materials and fuel available.
1.1.2. Sanitation (latrines) installed in at least 13 HCs (Annex 6. P.3 for proposed sites	• Number of HCs with improved sanitation	HMIS/Survey	
1.1.3. Electricity and power supply installed in at least 19 HCs (Annex 6. P.5 for proposed sites)	• Number of HCs with electricity	HMIS/Survey	
1.1.4. At least 10 placenta pits and 10 incinerators constructed in HCs (Annex 6. P.4 for proposed sites)	• Number of HCs with adequate waste mgmt. standards	HMIS/Survey	
1.1.5 General maintenance done in at least 13 health facilities	• Number of HCs maintained	HMIS/Survey	
1.1.6 General maintenance of buildings and equipment through maintenance fund.	• Number of buildings and equipment maintained	Maintenance report	
1.2 Improved Infrastructure and equipment in maternal and neonatal care services in HCs			
1.2.1. At least 4 maternity wards constructed (Annex 7 for proposed sites)	• Number of maternity wards constructed	HMIS/HSSP	• Sustained availability of funding

1.2.2. Maternity ward constructed at the MDH	• Maternity ward constructed	HMIS	• Effective procurement process • Political will • Availability of qualified contractors • Building materials available
1.2.3. Beds and equipment provided for at least 6 maternity wards (Annex 7 for proposed sites)	• Number of Maternity Wards provided with Beds and Equipment	HMIS	
1.2.4. At least 11 Waiting homes constructed (Annex 7 for proposed sites)	• Number of waiting homes constructed	HMIS	
1.2.5. At least 10 Staff houses constructed (Annex 7 for proposed sites)	• Number of staff houses constructed	HMIS	
1.2.6. At least 10 Health posts constructed and provided with electricity	• Number of Health Posts Constructed	HMIS/EPI REPORTS	
1.2.7. At least 20 vaccine fridges provided at health posts and other health centres (Annex 7 for proposed sites)	• Number of Health posts and health centres provided with vaccine fridges.	HMIS/EPI REPORTS	
1.2.8 At least 5 health facilities provided with furniture	• Number of health facilities provided with furniture	HMIS	
2. Increased coverage of high impact, quality Maternal and Child health services			
2.1. Improved referral services			
2.1.1. At least 5 ambulances purchased and in operation with operational guidelines in place	• Number of ambulances in peripheral health facilities	HSSP Reports	• Effective procurement process • Effective transport guidelines • Effective use of communication system by staff • Driving licences in place by all users • Reliable road network • Adequate maintenance of bicycles and motorcycles
2.1.2 At least 8 bicycle ambulances purchased and in operation with operational guidelines in place	• Number of bicycle ambulances located in hard to reach areas	HSSP Reports	
2.1.3 At least 5 motorcycle ambulances purchased and in operation with operational guidelines in place	• Number of motorcycles procured	HSSP Reports	
2.1.4. A Feasibility assessment on the effective communication strategy between health facilities and between the facilities and the ambulance services done and implemented	• Number of health facilities with an effective communication system in the district	HSSP Reports	
2.2. Strengthened Community based health services			
2.2.1 At least 35 HSAs trained in initial training (12 week course)	Number of HSAs undergone the Initial Training	HMIS REPORTS	• Sustained political will. • Willingness by the community to participate in health programmes
2.2.2 At least 550 bicycles provided for HSAs	• Proportion of H.S.As with bicycles	HMIS REPORTS	• Sustained political will. • Willingness by the community to
2.2.3 At least 8 community midwives trained	• Number of community	HMIS reports	

	midwives trained in obstetric skills		participate in health programmes
2.2.4 HSAs provided with required equipment	• Proportion of HSAs with required equipment	HSSP	
2.2.5 At least 874 Village Health Committees trained in Primary Health Care management	• Number of VHCs trained in PHC •	HMIS REPORTS	
2.2.6 At least 30 Health Centre Advisory Committees trained on their roles and responsibilities.	Proportion of Functional HACs in the district.	HSSP (HSSP HMIS/HSSP)	
3. Improved Capacity of the health system to deliver services			
3.1. Improved Working Conditions for Public Health (PH) Support Staff at the DHO.			
3.1.1 Public Health Office at DHO renovated	• A renovated and equipped Public Health Office	HMIS REPORTS	
3.1.2. Public Health office is equipped	• A renovated and equipped Public Health Office	HMIS REPORTS	
3.1.3. One (1) 4x4 vehicle for supervision for Public Health office provided and operational	• A 4x4 Vehicle for supervision handed over	HMIS REPORTS	
3.1.4. At least 12 motorcycles for supervision for Public Health office purchased and operational.	• Number of Motorcycles procured and used for supervision of public health activities	REPORTS/HSSP	
3.2 Institutional capacity strengthened at the DHO			
3.2.1 Needs assessment for training and capacity building for DHO staff prepared.	Availability of needs assessment report	HMIS REPORTS	• Commitment of health workers who are trained to continue working in the district for a specified period of time
3.2.2 At least 10 staff trained in accordance with the needs assessment with scholarships from the education fund	• Number of health workers undergone through certified courses.	Training Report	
3.2.3 At least 12 research projects funded and research findings disseminated to relevant parties.	• Number of research projects reports.	Training Report Research Reports	
3.2.4 Computer lab established	• Computer lab functional	HMIS/DIP REPORTS	
3.3.Improved/Strengthened Health Management Information System			
3.3.1 Computer and internet service installed at the DHO and in 4 health zones (5 in all).	• Number of Health zones with effective internet services	HMIS/DIP REPORTS	• There will be proper usage and maintenance of the facilities • Low attrition rate of trained personnel
3.3.2 Training and capacity building in HMIS for coordinators and health centre management teams.	• Number of programme coordinators and	HMIS REPORTS	

	health centre management teams trained in HMIS		
3.3.3 Village health registers fully institutionalized in the district.	• Proportion of updated village health registers	HMIS/DIP REPORTS	

ACTIVITIES AND WORKPLAN 2012-2016	2012				2013				2014				2015			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1.1. General infrastructure in the network of the MoH health centres is strengthened																
1.1.1.1. Install safe Water Supply in at least in 13 health facilities			1			2	2			2	2				2	2
1.1.2.1. Construct at least 26 Pit Latrines in 13 health facilities		5			7				7				7			
1.1.3.1. Install Electricity in at least 12 health facilities (SOLAR)			2	1			3				2	2			2	
1.1.3.2. Install Electricity in at least 7 health facilities (ESCOM)				4				3								
1.1.4.1. Construct at least 10 placenta pits/incinerators		2			3				3				2			
1.1.5.1. Assess and plan general required maintaince in at least 13 HCs																
1.1.5.2. General Maintenance of at least 13 health facilities				4				3				3				3
1.1.6.1. Buildings and equipment maintained																
1.2. Improved infrastructure and equipment in maternal and child health services in HCs																
1.2.1.1 Construct at least 4 Maternity Wards						2				1				1		
1.2.2.1. Construct maternity ward at the MDH																
1.2.3.1. Procure Beds and Equipment for at least 6 maternity wards				1				3				1				1
1.2.4.1. Construct at least 11 Waiting homes				2		2				4				3		
1.2.5.1. Construct at least 10 Staff Houses							3				4				3	
1.2.6.1. Construct at least 10 Health Posts			1	1				2	1			2	2			1
1.2.7.1. Procure at least 20 Vaccine Refrigerators				5	5				5				5			
1.2.8.1 Procure Furniture in at least 5 health facilities		2				1			1				1			
2.1. Improved Referral System																
2.1.1.1. Procure 5 Motor vehicle ambulances	2				1				1				1			
2.1.2.1. Procure 8 bicycle ambulances						3				3				2		
2.1.3.1. Procure 5 Motorcycle ambulances			2		1				1					1		
2.1.4.1. Conduct a feasibility assessment on the effective communication system																
2.1.4.2. Implement communication system				1												
2.2. Strengthened Community based health services																
2.2.1.1. Conduct initial training of at least 35 Health Surveillance Assistants(HSAs) in PHC																
2.2.2.1. Procure 550 bicycles for HSAs		275	275													

2.2.3.1. 8 community midwives trained																	
2.2.4.1. Procure Equipment for H.S.As																	
2.2.5.1. Train 874 Village Health Committees (VHCs) in the management of PHC																	
2.2.6.1. Train at least 30 Health Advisory Committees (HACs) on their roles and responsibility																	
3.1. Improved Working Conditions for Public Health Support Staff at the DHO																	
3.1.1.1. Plan renovations at Public Health Office																	
3.1.1.2. Procure renovation work at Public Health Office																	
3.1.2.1. Equip Public Health Office																	
3.1.3.1. Hand over 4x4 vehicle for supervision for public health office																	
3.1.4.1. Procure at least 12 motor cycles			2	2	2	2			2	2							
3.2. Institutional capacity strengthened at the DHO																	
3.2.1.1.Conduct training needs assessment																	
3.2.1.2. Develop 4 year training plan																	
3.2.1.3. Establish selection committee																	
3.2.1.4 Establish education fund																	
3.2.1.5. At least 10 staff trained																	
3.2.2.1. Establish research strategy																	
3.2.2.2. Establish selection committee																	
3.2.2.3. Establish research fund																	
3.2.2.4. Disburse research grants																	
3.2.2.5 Disseminate research findings																	
3.2.3.1. Plan requirements for computer lab																	
3.2.3.2. Establish computer lab																	
3.3. Improved /Strengthened Health Management Information Systems																	
3.3.1.1. Plan internet and computer requirements at DHO and 4 health zones																	
3.3.1.2 Procure internet service and computers at the DHO and 4 health zones			2	3													
3.3.1.2. Install internet and computers			2	3													
3.3.2.1. Train programme coordinators and health centre management teams in HMIS																	
3.3.3.1. Procure 874 VHR books																	

3.3.3.2. Train at least 355 HSAs and 18 supervisors in VHR																	
3.3.3.3. Conduct data collection week using VHR																	
3.3.3.4.Conduct a research on the Comparison of facilities performing well better in VHR with those not performing well																	
3.3.3.5. Develop data base for VHR																	
3.3.3.6. Orient Stakeholders on VHR																	
3.3.3.7. Conduct review meetings on VHR																	
3.3.3.8. Conduct Supervision on VHR																	

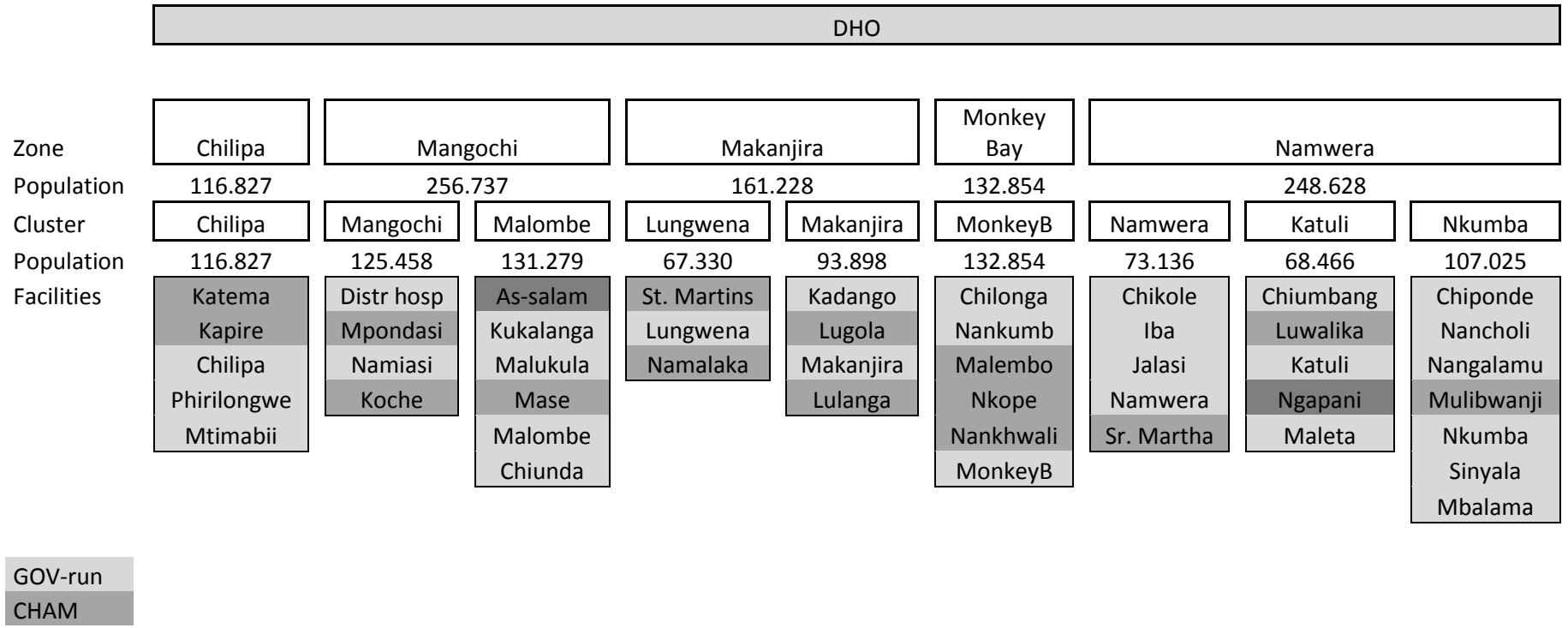
Annex 2: Budget

Activities / Budget Year	2012-2013	2013-2014	2014-2015	2015-2016	Total USD	% of total
1. Improved health services infrastructure						
1.1 General infrastructure in the network of the MoH health centres strengthened						
1.1.1.1. Safe water supply installed in at least 13 HCs	25.000	98.000	98.000	98.000	319.000	
1.1.2.1. Sanitation (latrines) installed in at least 13 HCs	31.000	43.000	43.000	43.000	160.000	
1.1.3.1. Install Electricity in at least 12 health facilities (SOLAR)	47.000	46.000	62.000	31.000	186.000	
1.1.3.1. Install Electricity in at least 7 health facilities (ESCOM)	37.000	28.000	0	0	65.000	
1.1.4.1. Construct at least 10 placenta pits/incinerators	37.000	55.000	55.000	37.000	184.000	
1.1.5.2. General Maintenance done in at least 13 health facilities	61.000	46.000	46.000	46.000	199.000	
1.1.6.1. Buildings and equipment maintained (maintenance fund)	20.000	20.000	20.000	20.000	80.000	
Sum General infrastructure:	**258.000**	**336.000**	**324.000**	**275.000**	**1.193.000**	**20%**
1.2. Improved infrastructure and equipment in maternal and child health services in HCs						
1.2.1.1. Construct at least 4 Maternity Wards	0	361.000	181.000	181.000	723.000	
1.2.2.1. Maternity ward constructed at Mangochi District Hospital	181.000	723.000	0	0	904.000	
1.2.3.1. Procure beds for at least 6 maternity wards	4.000	24.000	4.000	4.000	36.000	
1.2.3.1. Procure equipment for at least 6 maternity wards	25.000	256.000	25.000	25.000	331.000	
1.2.4.1. Construct at least 11 Waiting homes	91.000	91.000	181.000	136.000	499.000	
1.2.5.1. Construct at least 10 Staff Houses	0	127.000	169.000	127.000	423.000	
1.2.6.1. Construct at least 10 Health Posts	62.000	61.000	92.000	92.000	307.000	
1.2.7.1. Procure at least 20 Vaccine Refrigerators	4.000	4.000	4.000	4.000	16.000	
1.2.8.1. Procure Furniture in at least 5 health facilities	7.000	4.000	4.000	4.000	19.000	
Sum Improved Health Services Infrastructure:	**374.000**	**1.651.000**	**660.000**	**573.000**	**3.258.000**	**55%**
2. Increased coverage of high impact, quality maternal and child health services						
2.1. Improved Referral System						
2.1.1.1. At least 5 ambulances purchased	139.000	70.000	70.000	70.000	349.000	
2.1.1.1. Maintenance and operational cost of ambulances for first year of operations	45.000	45.000	45.000	45.000	180.000	
2.1.2.1. At least 8 bicycle ambulances purchased	0	1.000	1.000	1.000	3.000	
2.1.3.1. At least 5 motorcycle ambulances purchased	31.000	16.000	16.000	16.000	79.000	
2.1.3.1. Maintenance and operational cost of motorcycle ambulances for first year of operations	13.000	13.000	13.000	13.000	52.000	
2.1.4.2. Implement communication system	14.000	0	0	0	14.000	
Sum Improved Referral System:	**242.000**	**145.000**	**145.000**	**145.000**	**677.000**	**11%**

2.2. Strengthen community based health services						
2.2.1.1. At least 35 HSAa trained in initial training	31.000	0	0	0	31.000	
2.2.2.1. At least 550 bicycles provided for HSAs	50.000	0	0	0	50.000	
2.2.3.1. HSAs provided with required equipment	52.000	0	0	0	52.000	
2.2.4.1. At least 874 villages trained in Primary Health Care management	8.000	8.000	12.000	0	28.000	
2.2.5.1. At least 30 Health Advisory Committees (HACs) on their roles and responsibilities	4.000	0	0	0	4.000	
Sum Community Based Health Services:	**145.000**	**8.000**	**12.000**	**0**	**165.000**	**3%**
3. Improved capacity of the health system to deliver services						
3.1. Improved working conditions for public health (PH) support staff at the DHO						
3.1.1.2. Public Health Office at DHO renovated	22.000	0	0	0	22.000	
3.1.2.1. Public Health Office equipped	4.000	0	0	0	4.000	
3.1.4.1. Procure at least 12 motor cycles for Public Health Office	38.000	38.000	38.000	0	114.000	
Sum Improved Working Conditions:	**64.000**	**38.000**	**38.000**	**0**	**140.000**	**2%**
3.2. Institutional Capacity Strengthened at DHO						
3.2.1.5. At least 10 staff trained with scholarships from the education fund	43.000	43.000	43.000	43.000	172.000	
3.2.2.4. At least 12 research projects funded by research fund	32.000	32.000	32.000	32.000	128.000	
3.2.3.2. Computer lab established at the hospital	0	16.000	0	0	16.000	
Sum institutional capacity strengthened at DHO:	**75.000**	**91.000**	**75.000**	**75.000**	**316.000**	**5%**
3.3. Improved /Strengthened Health Management Information Systems						
3.3.1.2. Install internet service and computers at the DHO and 4 health zones (5 total)	17.000	0	0	0	17.000	
3.3.2.1. Capacity building in HMIS for coordinators and health centre management teams	6.000	6.000	6.000	6.000	24.000	
3.3.3.1. Procure 874 VHR books	16.000	0	0	0	16.000	
3.3.3.2. Train at least 355 HSAs and 18 supervisors in VHR	16.000	0	0	0	16.000	
3.3.3.3. Conduct data collection week using VHR	2.000	0	0	0	2.000	
3.3.3.4. Institutionalization of VHR	0	18.000	18.000	18.000	54.000	
Sum Information Systems:	**57.000**	**24.000**	**24.000**	**24.000**	**129.000**	**2%**
4. Mid term review of project	0	0	40.000	0	40.000	
Sum mid term review:	**0**	**0**	**40.000**	**0**	**40.000**	**1%**
Total:	**1.215.000**	**2.293.000**	**1.318.000**	**1.092.000**	**5.918.000**	**100%**

Notes: This is an indicative budget, which uses an exchange rate of 333 MKW/USD with budget timeline based on the Malawian budget year.

Annex 3: Health services infrastructure in Mangochi (p.1)



Note: Namiasi, Maleta and Mbalama are operated by HSAs and are not counted in denominator for staffing level

Denominator for staffing level is 42 (25 MoH health centres, 15 CHAM centres and 2 private clinics)

Annex 3 (p.2)

Government health services infrastructure in Mangochi including centres with service level agreements (SLAs)

Zone	Chilipa	Mangochi		Makanjira		Monkey Bay	Namwera		
Population	77.065	203.515		73.130		123.831	215.580		
Cluster	Chilipa	Mangochi	Malombe	Lungwena	Makanjira	MonkeyB	Namwera	Katuli	Nkumba
Population	77.065	108.330	95.185	29.036	44.094	123.831	61.264	47.291	107.025
Facilities	Chilipa	Distr hosp	Kukalanga	Lungwena	Kadango	Chilonga	Chikole	Chiumbang	Chiponde
	Phirilongwe	Namiasi	Malukula		Makanjira	Nankumb	Iba		Nancholi
	Mtimabii	Koche				Malembo	Jalasi	Katuli	Nangalamu
			Malombe			Nkope	Namwera		Mulibwanji
			Chiunda					Maleta	Nkumba
						MonkeyB			Sinyala
									Mbalama

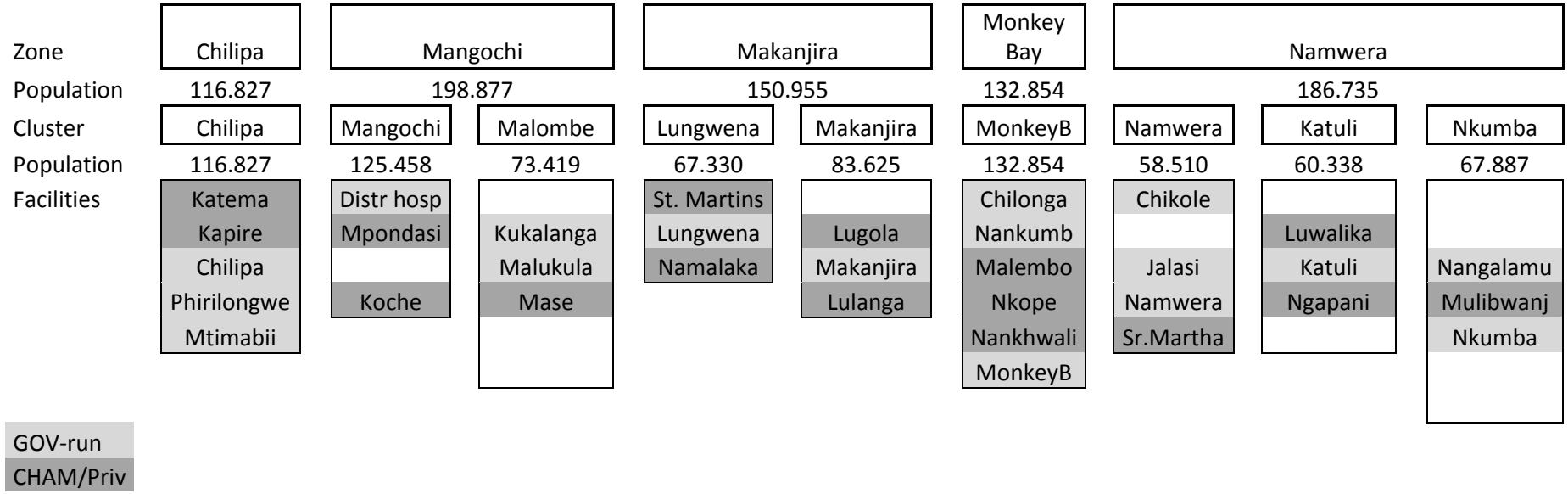
GOV-run

CHAM

Population figures: revised projections for fiscal year 2012/2013 based on 2008 census

Annex 3 (p.3)

Infrastructure for maternity services* in Mangochi District



* This means that the facility has a maternity unit, ie it offers antenatal, labour and postnatal services.

Blanc areas represent health facilities without maternity services

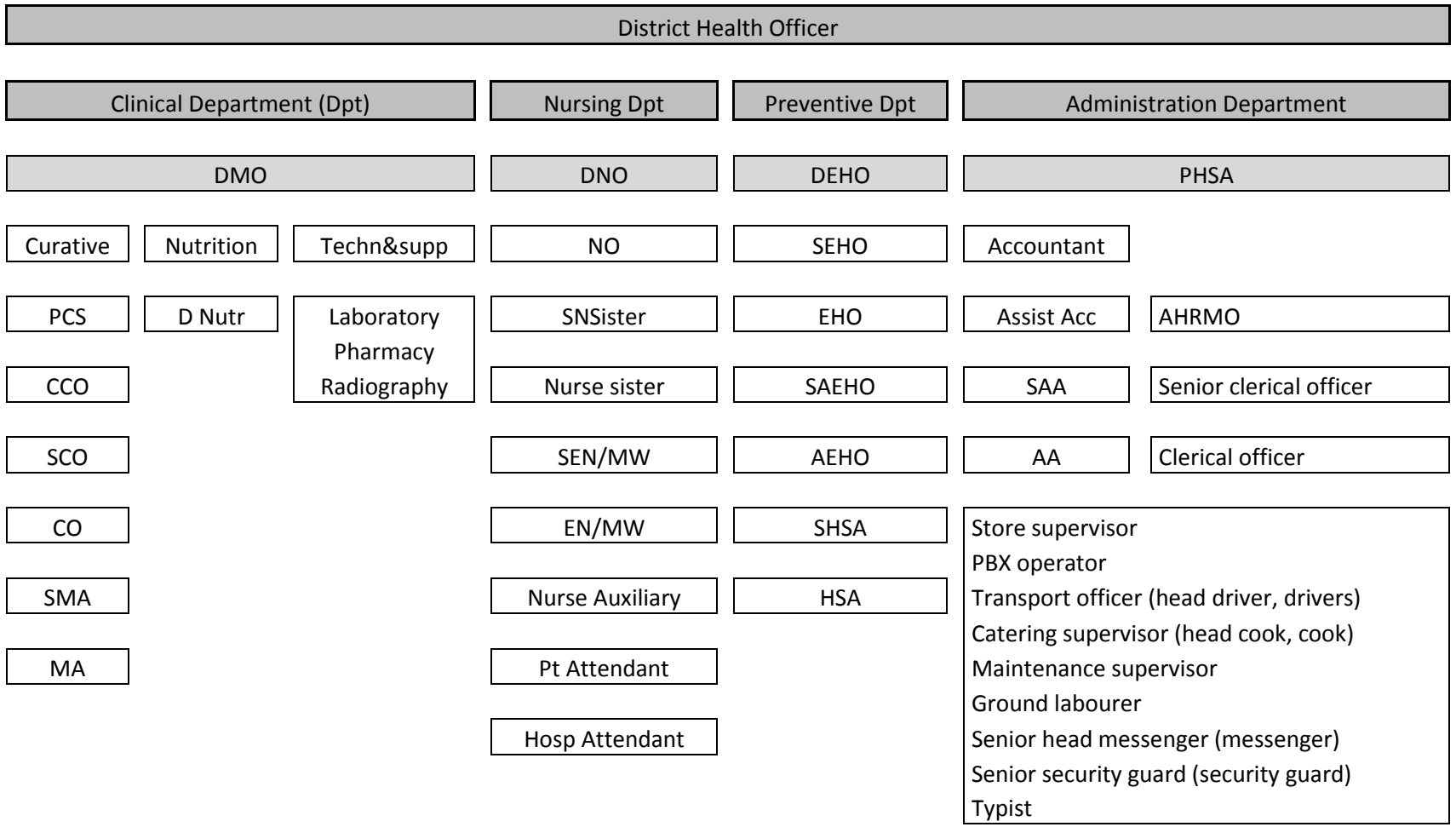
Annex 3 (p.4)

Infrastructure for maternity services in Mangochi Districts excluding CHAM facilities without service level agreements (SLAs)

Zone	Chilipa	Mangochi		Makanjira		MonkeyB	Namwera		
Population	77.065	153.934		62.856		123.831	140.234		
Cluster	Chilipa	Mangochi	Malombe	Lungwena	Makanjira	MonkeyB	Namwera	Katuli	Nkumba
Population	77.065	108.330	45.604	29.036	33.820	123.831	46.638	25.709	67.887
Facilities	Chilipa Phirilongwe Mtimabii	Distr hosp Koche	Kukalanga Malukula	Lungwena	Makanjira	Chilonga Nankumba Malembo Nkope MonkeyB	Chikole Jalasi Namwera	Katuli	Nangalamu Mulibwanji Nkumba

GOV-run
CHAM/Priv

Annex 4. Organisation of the District Health Service (p.1)



Annex 4 (p.2)

Details of Preventive Department

Preventive Dpt	Level	Posts	Filled
DEHO	DHO	1	1
SEHO	DHO	1	0
EHO	DHO	3	3
SAEHO/AEHO	HC	42	12
SHSA	HC	30	42
HSA	HP/V	916	555
	Level	Posts	Filled

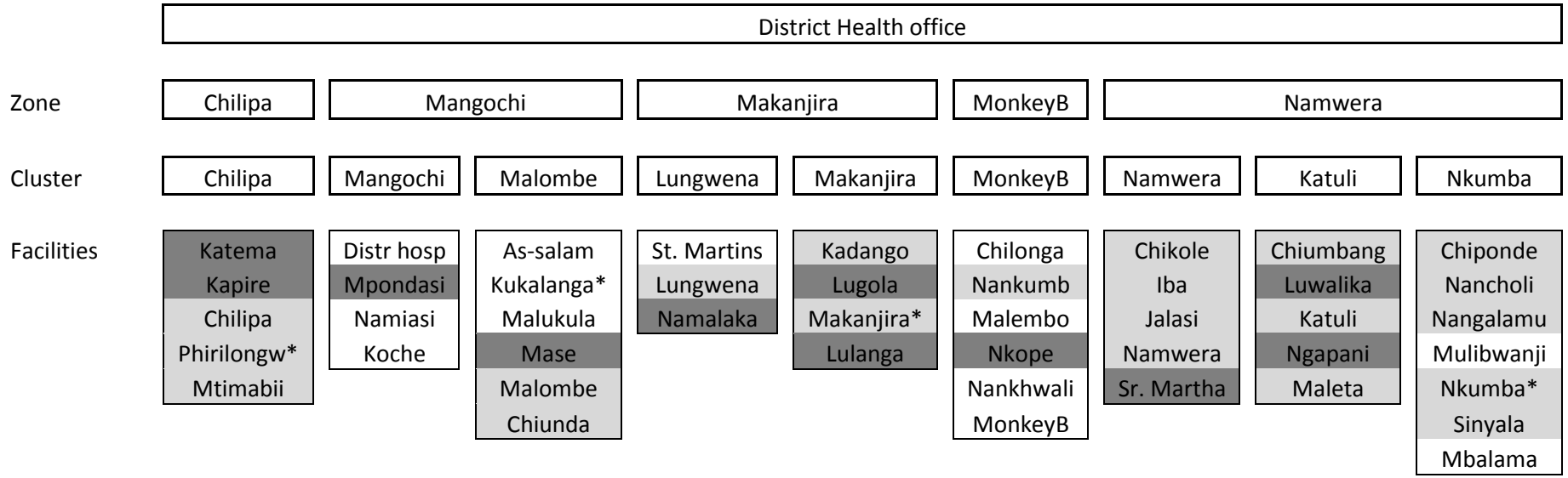
Annex 5: Environmental / Public Health Organogram

Head of Dpt	DEHO								
Zone	Chilipa	Mangochi			Makanjira		MonkeyB	Namwera	
Coordinator	1	1			1		1	1	
Cluster	Chilipa	Mangochi	Malombe	Kukalanga	Lungwena	Makanjira	MonkeyB	Namwera	Katuli	Nkumba
Supervisor	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
Facilities	Katema	Distr hosp	Malukula	As-salam	St. Martins	Lugola	Chilonga	Chikole	Luwalika	Chiponde
	Kapire	Mpondasi	Mase	Kukalanga	Lungwena	Makanjira	Nankumb	Iba	Katuli	Nacholi
	Chilipa	Namiasi	Malombe		Namalaka	Lulanga	Malembo	Jalasi	Ngapani	Nangalamu
	Phirilongwe	Koche	Chiunda		Kadango		Nkope	Namwera	Maleta	Mulibwanji
	Mtimabii						Nakhwali	Sr. Martha		Nkumba
							MonkeyB	Chiumbang		Sinyala
										Mbalama

Zonal coordinators and cluster supervisors are all male except one newly recruited
Zonal coordinators are degree holders stationed at DHO
Cluster supervisors are diploma holders stationed in strategic health facilities

Annex 6: Needs assessment for improvement of infrastructure in health centres (p.1)

Need for improvement in water supply, sanitation facilities, waste disposal and or power in health centres



ICEIDA/GOV	Proposed ICEIDA implementation sites for water, sanitation, power, and or waste disposal in health facilities
CHAM	CHAM sites needing similar intervention (but will not be included)

* Renovation is taking place under Umoyo or other projects

This information is based on a survey carried out in May 2011

Annex 6 (p.2)

Need for intervention in improved water supply in health centres

	District Health office								
Zone	Chilipa	Mangochi		Makanjira		MonkeyB	Namwera		
Cluster	Chilipa	Mangochi	Malombe	Lungwena	Makanjira	MonkeyB	Namwera	Katuli	Nkumba
Facilities	Katema Kapire Chilipa Phirilongw* Mtimabii	Distr hosp Mpondasi Namiasi Koche	As-salam Kukalanga* Malukula Mase Malombe Chiunda	St. Martins Lungwena Namalaka	Kadango Lugola Makanjira* Lulanga	Chilonga Nankumb Malembo Nkope Nankhwali MonkeyB	Chikole Iba Jalasi Namwera Sr. Martha	Chiumbang Luwalika Katuli Ngapani Maleta	Chiponde Nancholi Nangalamu Mulibwanji Nkumba* Sinyala Mbalama

ICEIDA/GOV	Proposed ICEIDA implementation sites in improved water supply
CHAM	CHAM sites needing similar intervention (but will not be included)

* Renovation is taking place under Umoyo or other projects

This information is based on a survey carried out in May 2011

Annex 6 (p.3)

Need for intervention in improved sanitation facilities (latrines) in health centres

	District Health office								
Zone	Chilipa	Mangochi		Makanjira		MonkeyB	Namwera		
Cluster	Chilipa	Mangochi	Malombe	Lungwena	Makanjira	MonkeyB	Namwera	Katuli	Nkumba
Facilities	Katema	Distr hosp	As-salam	St. Martins	Kadango	Chilonga	Chikole	Chiumbang	Chiponde
	Kapire	Mpondasi	Kukalanga*	Lungwena	Lugola	Nankumb	Iba	Luwalika	Nancholi
	Chilipa	Namiasi	Malukula	Namalaka	Makanjira*	Malembo	Jalasi	Katuli	Nangalamu
	Phirilongw*	Koche	Mase		Lulanga	Nkope	Namwera	Ngapani	Mulibwanji
	Mtimabii		Malombe			Nankhwali	Sr. Martha	Maleta	Nkumba*
			Chiunda			MonkeyB			Sinyala
									Mbalama

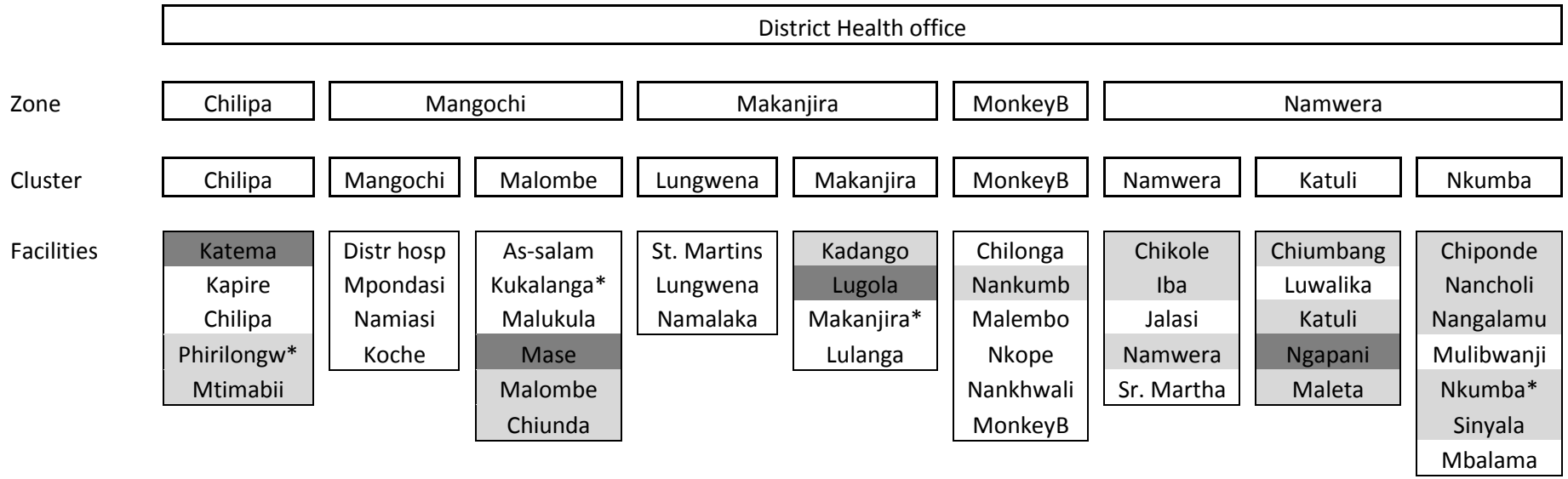
ICEIDA/GOV	Proposed ICEIDA implementation sites for improved sanitation (latrines) in health facilities
CHAM	CHAM sites needing similar intervention (but will not be included)

* Renovation is taking place under Umoyo or other projects

This information is based on a survey carried out in May 2011

Annex 6 (p.4)

Need for intervention in improved waste disposal management in health centres



ICEIDA/GOV	Proposed ICEIDA implementation sites for improved waste disposal in health facilities
CHAM	CHAM sites or private clinics needing similar intervention (but will not be included)

* Renovation is taking place under Umoyo or other projects

This information is based on a survey carried out in May 2011
Waste disposal refers to incinerators and placenta pits (open pit burning is not acceptable)

Annex 6 (p.5)

Need for intervention in power supply (ESCOM or solar) in health centres

	District Health office								
Zone	Chilipa	Mangochi		Makanjira		MonkeyB	Namwera		
Cluster	Chilipa	Mangochi	Malombe	Lungwena	Makanjira	MonkeyB	Namwera	Katuli	Nkumba
Facilities	Katema Kapire Chilipa Phirilongw* Mtimabii	Distr hosp Mpondasi Namiasi Koche	As-salam Kukalanga* Malukula Mase Malombe Chiunda	St. Martins Lungwena Namalaka	Kadango Lugola Makanjira* Lulanga	Chilonga Nankumb Malembo Nkope Nankhwali MonkeyB	Chikole Iba Jalasi Namwera Sr. Martha	Chiumbang Luwalika Katuli Ngapani Maleta	Chiponde Nancholi Nangalamu Mulibwanji Nkumba* Sinyala Mbalama

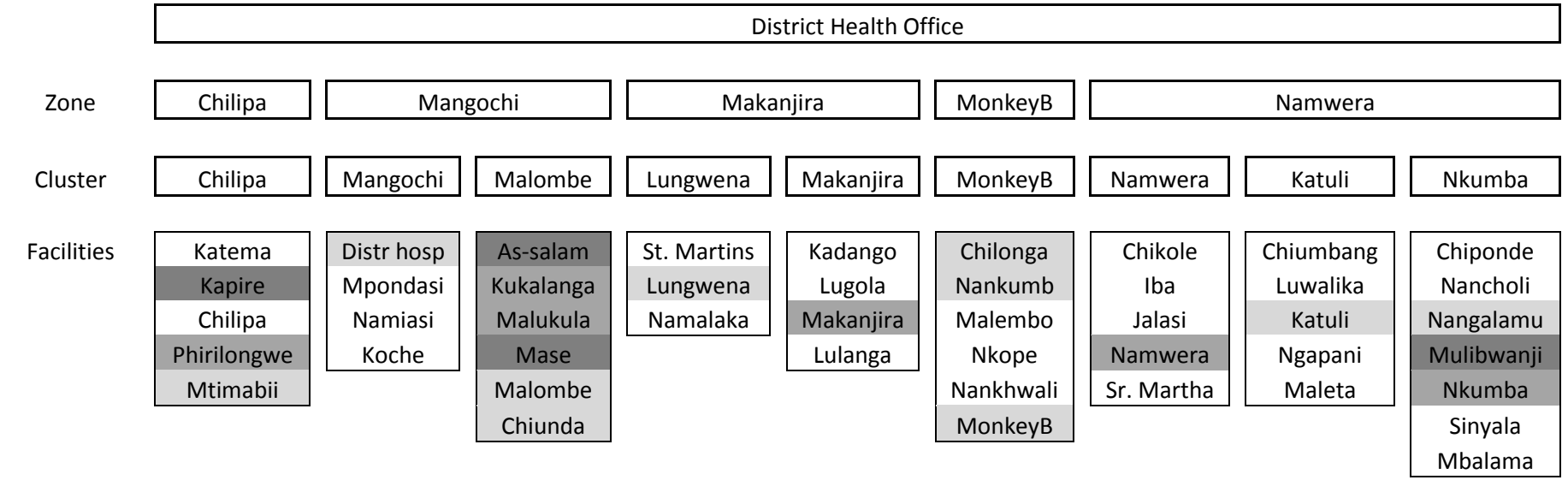
ICEIDA/GOV	Proposed ICEIDA implementation sites for electricity in health facilities
CHAM	CHAM sites needing similar intervention (but will not be included)

* Renovation is taking place under Umoyo or other projects

This information is based on a survey carried out in May 2011

Annex 7:. Suggestions for investment in maternity wards in health centres

Suggested ICEIDA intervention sites for construction and renovation of maternity wards in health centres



ICEIDA	Proposed ICEIDA implementation sites (7 new - the 3 sites in Monkey Bay cluster are sites where ICEIDA has been involved) * Makanjira was under Omoyo but may need additional expansion (and needs maternity beds) * Kukalanga was Omoyo but lacks beds and equipment
OMOYO	Omoyo project or other gov or MP initiated projects (6) - some are incomplete
NGO	CHAM or other ongoing or complete private sector projects (4)

Annex 7 (p.2)

Zone	Chilipa	Mangochi		Makanjira		MonkeyB	Namwera		
Population	116.827	256.737		161.228		132.854	248.628		
Cluster	Chilipa	Mangochi	Malombe	Lungwena	Makanjira	MonkeyB	Namwera	Katuli	Nkumba
Facilities	1 Katema	H Distr hosp		H St. Martins		3 Chilonga	1 Chikole		
	2 Kapire	1 Mpondasi	3 Kukalanga*	Lungwena	1 Lugola	2 Nankumb		2 Luwalika	
	3 Chilipa		2 Malukula	1 Namalaka	3 Makanjira*	2 Malembo	1 Jalasi	2 Katuli	2 Nangalamu
	2 Phirilongw*	2 Koche	1 Mase		1 Lulanga	2 Nkope	3 Namwera	2 Ngapani	H Mulibwanj*
	2 Mtimabii					2 Nankhwali	2 Sr. Martha		1 Nkumba*
						H MonkeyB			
Population	116.827	125.458	131.279	67.330	93.898	132.854	73.136	68.466	107.025
Deliv beds	10 (*)	3 (+10H)	6	(3?) (+4H)	5 (*)	11 (+8H)	7	6	3 (*) (+3H)
Pop/bed	11.683	9.650	21.880	9.619	18.780	6.992	10.448	11.411	15.289

(*)=expansion ongoing at time of the survey, H=hospital

GOV-run

CHAM/Priv

Mtimabii HC: Unacceptable conditions - need new maternity unit. Guardian shelter needs improvement but staff houses are in good condition.
Malobme/Chiunda: Need upgrading to HC - construction of maternity ward (5-6 delivery beds) – need guardian shelter + renovation of staff houses.
Kukalanga: Has been upgraded to HC - need only delivery beds (and may need equipment).
Makanjira HC: Has been expanded but needs delivery beds. Possibly upgrade to EmOC Unit? Or construct simple maternity elsewhere in the area?
Katuli HC: Unacceptable conditions - need new maternity unit and guardian shelter (there are 6 good staff houses).
Nangalamu HC: Unacceptable conditions - need new maternity unit (guardian shelter and 4 staff houses need renovation).

Annex 8: Population figures (Mangochi District)

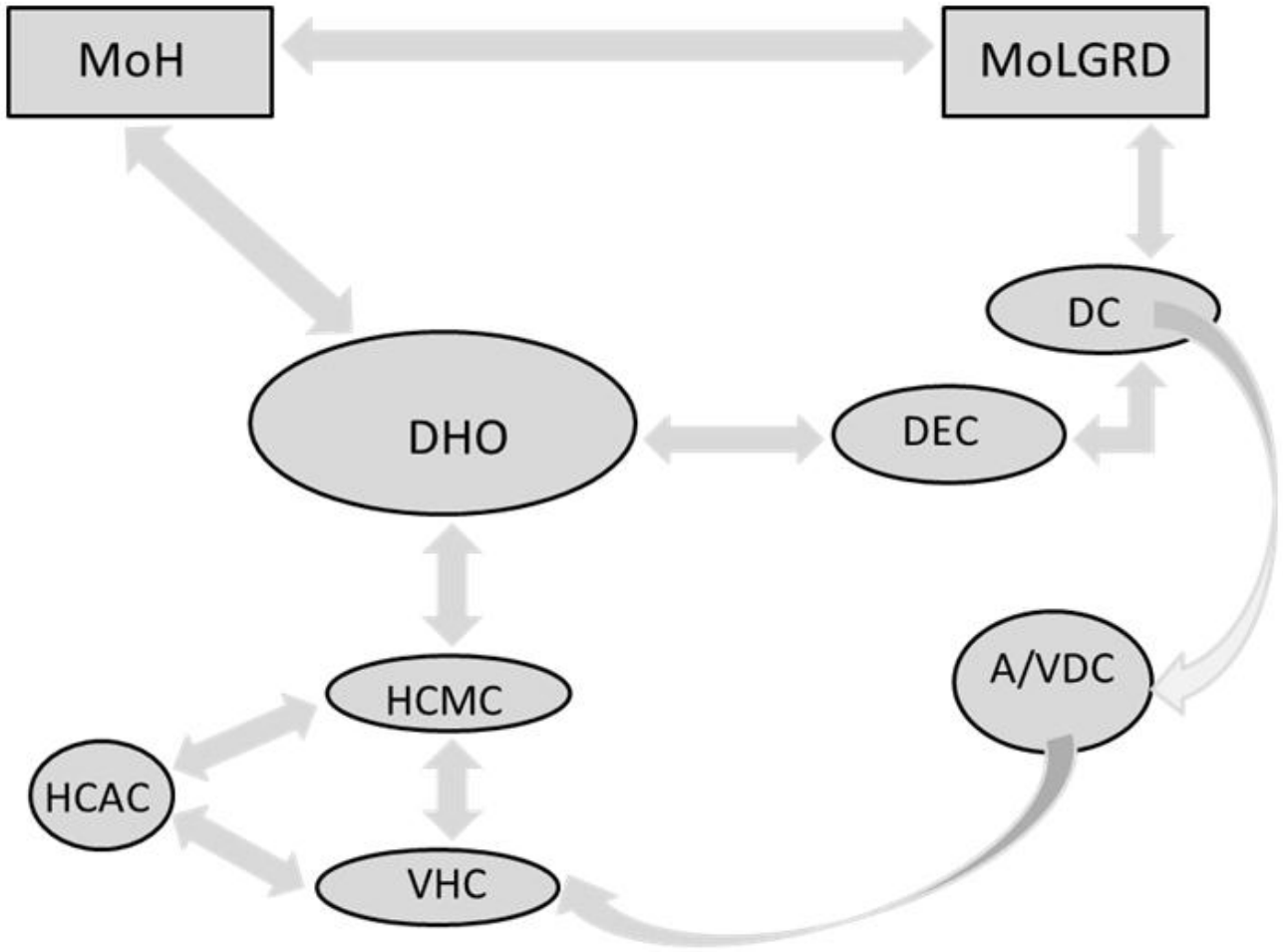
Health zone	HMIS 2009/2010	HMIS 2010/2011	*Increase %*	HMIS 2011/2012	*Increase %*	HMIS 2012/2013	*Increase %*		Head count 1st-q 2012	Difference from proj.	*%*
Chilipa	101.658	105.086	*3,37*	108.732	*3,35*	116.827	*7,44*		132.638	15.811	*13,53*
Mangochi	243.137	251.334	*3,37*	260.055	*3,35*	256.737	*- 1,27*		291.482	34.745	*13,53*
Makanjira	157.114	162.411	*3,37*	168.047	*3,35*	161.228	*- 4,06*		183.048	21.820	*13,53*
Monkey Bay	122.878	127.020	*3,37*	131.428	*3,35*	132.854	*1,09*		150.833	17.979	*13,53*
Namwera	202.969	209.812	*3,37*	217.093	*3,35*	248.628	*14,53*		282.275	33.647	*13,53*
Total	827.756	855.663	*3,37*	885.355	*3,35*	916.274	*3,49*		1.040.276	124.002	*13,53*

HMIS population figures are projections based on the 2008 census, revised in 2012. Census workers are trained and supervised. However, assumptions made in the projections may not hold or may not hold equally well for all health zones.

The “head count” is based on reports from community health workers (HSAs) who are responsible for village health registers. Some HSAs have not received training for this task. Trained community health workers are not uniformly distributed within the district. Reliability of the head count also depends on quality assurance which is neither sufficient nor uniform throughout the district.

Discrepancies between the two sources are inevitable and as seen above vary in magnitude between different health zones. All this makes it difficult to work with rates and comparisons between health zones. This proposal, as the HMIS, uses population projections.

Annex 9. Governance structure at district level



MoH=Ministry of Health, MoLGRD=Ministry of Local Government and Rural Development, DC=District Commissioner, DEC=District Executive Committee, DHO=District Health Office, HCMC=Health Center Management Committee, VHC=Village Health Committee, HCAC=Health Center Advisory Committee, A/VDC=Area/Village Development Committee

Annex 10: Procurement Plan

Activity	Loan #:	Description	Implementing Agency	Qty	Unit Price	Estimated Amount in MK¥	Procure-ment Method	Prior or Post Review	Plan vs Actual	Preparation by Agency	Iceida no objections	Bid/Quotation Invitation date	Bid/Quotation Closing/ Opening Date	Preparation of Evaluation Rpt	Submit to ODPP/IPC	Iceida no objections	Contract Amount in MK¥	Contract Finalization	Date Contract Signature	Contract starts
										21	7	28	1	14	14	7		5	10	
	01 GOODS	GOODS/WORKS/SERVICES								Days	Days	Days	Day	Days	Days	Days		Days	Days	
1.1.1.1.		Install reticulated water supply (solarpump)	DHO	1	8.000.000	8.000.000	NCB	Post	Actual	18-Dec-12	8-Jan-13	15-Jan-13	12-Feb-13	13-Feb-13	27-Feb-13	13-Mar-13	8.000.000	20-Mar-13	25-Mar-13	
1.1.1.1.		Install reticulated water supply (solarpump)	DHO	2	8.000.000	16.000.000	NCB	Prior	Actual	30-Sep-13	21-Oct-13	28-Oct-13	25-Nov-13	26-Nov-13	10-Dec-13	24-Dec-13	16.000.000	31-Dec-13	5-Jan-14	
1.1.1.1.		Install reticulated water supply (solarpump)	DHO	2	8.000.000	16.000.000	NCB	Prior	Plan	24-Dec-13	14-Jan-14	21-Jan-14	18-Feb-14	19-Feb-14	5-Mar-14	19-Mar-14	16.000.000	26-Mar-14	31-Mar-14	
1.1.1.1.		Install reticulated water supply (solarpump)	DHO	2	8.000.000	16.000.000	NCB	Post	Actual	19-Sep-14	10-Oct-14	17-Oct-14	14-Nov-14	15-Nov-14	29-Nov-14	13-Dec-14	16.000.000	20-Dec-14	25-Dec-14	
1.1.1.1.		Install reticulated water supply (solarpump)	DHO	2	8.000.000	16.000.000	NCB	Post	Plan	23-Dec-14	13-Jan-15	20-Jan-15	17-Feb-15	18-Feb-15	4-Mar-15	18-Mar-15	16.000.000	25-Mar-15	30-Mar-15	
1.1.1.1.		Install reticulated water supply (solarpump)	DHO	2	8.000.000	16.000.000	NCB	Post	Plan	23-Dec-15	13-Jan-16	20-Jan-16	17-Feb-16	18-Feb-16	3-Mar-16	17-Mar-16	16.000.000	24-Mar-16	29-Mar-16	
1.1.1.1.		Install reticulated water supply (solarpump)	DHO	2	8.000.000	16.000.000	NCB	Post	Plan	23-Mar-16	13-Apr-16	20-Apr-16	18-May-16	19-May-16	2-Jun-16	16-Jun-16	16.000.000	23-Jun-16	28-Jun-16	
1.1.2.1.		Construct Pit latrines	DHO	5	2.000.000	10.000.000	NCB	Post	Actual	15-Aug-12	5-Sep-12	12-Sep-12	10-Oct-12	11-Oct-12	25-Oct-12	8-Nov-12	10.000.000	15-Nov-12	20-Nov-12	
1.1.2.1.		Construct Pit latrines	DHO	7	2.000.000	14.000.000	NCB	Prior	Plan	20-Jun-13	11-Jul-13	18-Jul-13	15-Aug-13	16-Aug-13	30-Aug-13	13-Sep-13	14.000.000	20-Sep-13	25-Sep-13	
1.1.2.1.		Construct Pit latrines	DHO	7	2.000.000	14.000.000	NCB	Post	Plan	20-Jun-14	11-Jul-14	18-Jul-14	15-Aug-14	16-Aug-14	30-Aug-14	13-Sep-14	14.000.000	20-Sep-14	25-Sep-14	
1.1.2.1.		Construct Pit latrines	DHO	7	2.000.000	14.000.000	NCB	Post	Plan	20-Jun-15	11-Jul-15	18-Jul-15	15-Aug-15	16-Aug-15	30-Aug-15	13-Sep-15	14.000.000	20-Sep-15	25-Sep-15	
1.1.3.1.		Install electricity in Health centres (Solar)	DHO	2	5.000.000	10.000.000	NCB	Post	Plan	24-Dec-12	14-Jan-13	21-Jan-13	18-Feb-13	19-Feb-13	5-Mar-13	19-Mar-13	10.000.000	26-Mar-13	31-Mar-13	
1.1.3.1.		Install electricity in Health centres (Solar)	DHO	1	5.000.000	5.000.000	NCB	Prior	Plan	5-Jan-13	26-Jan-13	2-Feb-13	2-Mar-13	3-Mar-13	17-Mar-13	31-Mar-13	5.000.000	7-Apr-13	12-Apr-13	
1.1.3.1.		Install electricity in Health centres (Solar)	DHO	3	5.000.000	15.000.000	NCB	Prior	Plan	20-Dec-13	10-Jan-14	17-Jan-14	14-Feb-14	15-Feb-14	1-Mar-14	15-Mar-14	15.000.000	22-Mar-14	27-Mar-14	
1.1.3.1.		Install electricity in Health centres (Solar)	DHO	2	5.000.000	10.000.000	NCB	Prior	Plan	24-Dec-14	14-Jan-15	21-Jan-15	18-Feb-15	19-Feb-15	5-Mar-15	19-Mar-15	10.000.000	26-Mar-15	31-Mar-15	
1.1.3.1.		Install electricity in Health centres (Solar)	DHO	2	5.000.000	10.000.000	NCB	Prior	Plan	5-Jan-15	26-Jan-15	2-Feb-15	2-Mar-15	3-Mar-15	17-Mar-15	31-Mar-15	10.000.000	7-Apr-15	12-Apr-15	
1.1.3.1.		Install electricity in Health centres (Solar)	DHO	2	5.000.000	10.000.000	NCB	Prior	Plan	28-Dec-15	18-Jan-16	25-Jan-16	22-Feb-16	23-Feb-16	8-Mar-16	22-Mar-16	10.000.000	29-Mar-16	3-Apr-16	
1.1.3.1.		Install electricity in Health centres (Escom)	DHO	4	3.000.000	12.000.000	SSS	Post	Plan	25-Mar-13	15-Apr-13	22-Apr-13	20-May-13	21-May-13	4-Jun-13	18-Jun-13	12.000.000	25-Jun-13	30-Jun-13	
1.1.3.1.		Install electricity in Health centres (Escom)	DHO	3	3.000.000	9.000.000	SSS	Post	Plan	25-Mar-14	15-Apr-14	22-Apr-14	20-May-14	21-May-14	4-Jun-14	18-Jun-14	9.000.000	25-Jun-14	30-Jun-14	
1.1.4.1.		Construct placenta pit/Incinerator	DHO	2	6.000.000	12.000.000	NCB	Post	Plan	12-Aug-12	2-Sep-12	9-Sep-12	7-Oct-12	8-Oct-12	22-Oct-12	5-Nov-12	12.000.000	12-Nov-12	17-Nov-12	
1.1.4.1.		Construct placenta pit/Incinerator	DHO	3	6.000.000	18.000.000	NCB	Post	Plan	20-Jun-13	11-Jul-13	18-Jul-13	15-Aug-13	16-Aug-13	30-Aug-13	13-Sep-13	18.000.000	20-Sep-13	25-Sep-13	
1.1.4.1.		Construct placenta pit/Incinerator	DHO	3	6.000.000	18.000.000	NCB	Post	Plan	20-Jun-14	11-Jul-14	18-Jul-14	15-Aug-14	16-Aug-14	30-Aug-14	13-Sep-14	18.000.000	20-Sep-14	25-Sep-14	
1.1.4.1.		Construct placenta pit/Incinerator	DHO	2	6.000.000	12.000.000	NCB	Post	Plan	20-Jun-15	11-Jul-15	18-Jul-15	15-Aug-15	16-Aug-15	30-Aug-15	13-Sep-15	12.000.000	20-Sep-15	25-Sep-15	
1.1.5.2.		General maintenance of Health facilities	DHO	4	5.000.000	20.000.000	NCB	Post	Actual	25-Mar-13	15-Apr-13	22-Apr-13	20-May-13	21-May-13	4-Jun-13	18-Jun-13	20.000.000	25-Jun-13	30-Jun-13	
1.1.5.2.		General maintenance of Health facilities	DHO	3	5.000.000	15.000.000	NCB	Prior	Plan	25-Mar-14	15-Apr-14	22-Apr-14	20-May-14	21-May-14	4-Jun-14	18-Jun-14	15.000.000	25-Jun-14	30-Jun-14	
1.1.5.2.		General maintenance of Health facilities	DHO	3	5.000.000	15.000.000	NCB	Post	Plan	25-Mar-15	15-Apr-15	22-Apr-15	20-May-15	21-May-15	4-Jun-15	18-Jun-15	15.000.000	25-Jun-15	30-Jun-15	
1.1.5.2.		General maintenance of Health facilities	DHO	3	5.000.000	15.000.000	NCB	Post	Plan	25-Mar-16	15-Apr-16	22-Apr-16	20-May-16	21-May-16	4-Jun-16	18-Jun-16	15.000.000	25-Jun-16	30-Jun-16	
1.2.1.1.		Construct manternity wards	DHO	2	60.000.000	120.000.000	NCB	Prior	Plan	19-Sep-13	10-Oct-13	17-Oct-13	14-Nov-13	15-Nov-13	29-Nov-13	13-Dec-13	120.000.000	20-Dec-13	25-Dec-13	
1.2.1.1.		Construct manternity wards	DHO	1	60.000.000	60.000.000	NCB	Prior	Plan	10-Sep-14	1-Oct-14	8-Oct-14	5-Nov-14	6-Nov-14	20-Nov-14	4-Dec-14	60.000.000	11-Dec-14	16-Dec-14	
1.2.1.1.		Constract manternity wards	DHO	1	60.000.000	60.000.000	NCB	Prior	Plan	10-Sep-15	1-Oct-15	8-Oct-15	5-Nov-15	6-Nov-15	20-Nov-15	4-Dec-15	60.000.000	11-Dec-15	16-Dec-15	
1.2.2.1.		Construct manternity ward at MDH	DHO	1	300.000.000	300.000.000	NCB	Post	Plan	4-Jan-13	25-Jan-13	1-Feb-13	1-Mar-13	2-Mar-13	16-Mar-13	30-Mar-13	300.000.000	6-Apr-13	11-Apr-13	
1.2.3.1.		Equipment for MDH maternity ward	DHO	1	55.000.000	55.000.000	NCB	Prior	Plan	1-Mar-14	22-Mar-14	29-Mar-14	26-Apr-14	27-Apr-14	11-May-14	25-May-14	55.000.000	1-Jun-14	6-Jun-14	
1.2.3.1.		Equipment for MDH theatre	DHO	1	14.000.000	14.000.000	NCB	Prior	Plan	1-Mar-14	22-Mar-14	29-Mar-14	26-Apr-14	27-Apr-14	11-May-14	25-May-14	14.000.000	1-Jun-14	6-Jun-14	
1.2.3.1.		Equipment for maternity ward	DHO	1	8.000.000	8.000.000	NCB	Prior	Plan	21-Jan-13	11-Feb-13	18-Feb-13	18-Mar-13	19-Mar-13	2-Apr-13	16-Apr-13	8.000.000	23-Apr-13	28-Apr-13	
1.2.3.1.		Equipment for maternity ward	DHO	2	8.000.000	16.000.000	NCB	Prior	Actual	1-Mar-14	22-Mar-14	29-Mar-14	26-Apr-14	27-Apr-14	11-May-14	25-May-14	16.000.000	1-Jun-14	6-Jun-14	
1.2.3.1.		Equipment for maternity ward	DHO	1	8.000.000	8.000.000	NCB	Prior	Actual	1-Mar-15	22-Mar-15	29-Mar-15	26-Apr-15	27-Apr-15	11-May-15	25-May-15	8.000.000	1-Jun-15	6-Jun-15	
1.2.3.1.		Equipment for maternity ward	DHO	1	8.000.000	8.000.000	NCB	Prior	Plan	1-Mar-16	22-Mar-16	29-Mar-16	26-Apr-16	27-Apr-16	11-May-16	25-May-16	8.000.000	1-Jun-16	6-Jun-16	
1.2.3.1.		Labour Beds for Maternity ward at MDH	DHO	20	280.000	5.600.000	NCB	Prior	Plan	1-Mar-14	22-Mar-14	29-Mar-14	26-Apr-14	27-Apr-14	11-May-14	25-May-14	5.600.000	1-Jun-14	6-Jun-14	
1.2.3.1.		Labour Beds for Maternity wards	DHO	4	280.000	1.120.000	RFQ	Prior	Plan	21-Jan-13	11-Feb-13	18-Feb-13	18-Mar-13	19-Mar-13	2-Apr-13	16-Apr-13	1.120.000	23-Apr-13	28-Apr-13	
1.2.3.1.		Labour Beds for Maternity wards	DHO	8	280.000	2.240.000	RFQ	Prior	Plan	1-Mar-14	22-Mar-14	29-Mar-14	26-Apr-14	27-Apr-14	11-May-14	25-May-14	2.240.000	1-Jun-14	6-Jun-14	
1.2.3.1.		Labour Beds for Maternity wards	DHO	4	280.000	1.120.000	RFQ	Prior	Plan	1-Mar-15	22-Mar-15	29-Mar-15	26-Apr-15	27-Apr-15	11-May-15	25-May-15	1.120.000	1-Jun-15	6-Jun-15	
1.2.3.1.		Labour Beds for Maternity wards	DHO	4	280.000	1.120.000	RFQ	Prior	Plan	1-Mar-16	22-Mar-16	29-Mar-16	26-Apr-16	27-Apr-16	11-May-16	25-May-16	1.120.000	1-Jun-16	6-Jun-16	

1.2.4.1.		Construct waiting home	DHO	2	15.000.000	30.000.000	NCB	Post	Plan	17-Mar-13	7-Apr-13	14-Apr-13	12-May-13	13-May-13	27-May-13	10-Jun-13	30.000.000	17-Jun-13	22-Jun-13	
1.2.4.1.		Construct waiting home	DHO	2	15.000.000	30.000.000	NCB	Prior	Plan	10-Jul-13	31-Jul-13	7-Aug-13	4-Sep-13	5-Sep-13	19-Sep-13	3-Oct-13	30.000.000	10-Oct-13	15-Oct-13	
1.2.4.1.		Construct waiting home	DHO	4	15.000.000	60.000.000	NCB	Prior	Plan	10-Jul-14	31-Jul-14	7-Aug-14	4-Sep-14	5-Sep-14	19-Sep-14	3-Oct-14	60.000.000	10-Oct-14	15-Oct-14	
1.2.4.1.		Construct waiting home	DHO	3	15.000.000	45.000.000	NCB	Post	Plan	10-Jul-15	31-Jul-15	7-Aug-15	4-Sep-15	5-Sep-15	19-Sep-15	3-Oct-15	45.000.000	10-Oct-15	15-Oct-15	
1.2.5.1.		Construct Staff Houses	DHO	3	14.000.000	42.000.000	NCB	Post	Plan	22-Oct-13	12-Nov-13	19-Nov-13	17-Dec-13	18-Dec-13	1-Jan-14	15-Jan-14	42.000.000	22-Jan-14	27-Jan-14	
1.2.5.1.		Construct Staff Houses	DHO	4	14.000.000	56.000.000	NCB	Post	Plan	22-Oct-14	12-Nov-14	19-Nov-14	17-Dec-14	18-Dec-14	1-Jan-15	15-Jan-15	56.000.000	22-Jan-15	27-Jan-15	
1.2.5.1.		Construct Staff Houses	DHO	3	14.000.000	42.000.000	NCB	Prior	Plan	22-Oct-15	12-Nov-15	19-Nov-15	17-Dec-15	18-Dec-15	1-Jan-16	15-Jan-16	42.000.000	22-Jan-16	27-Jan-16	
1.2.6.1.		Construct Health post	DHO	1	10.000.000	10.000.000	NCB	Prior	Plan	4-Oct-12	25-Oct-12	1-Nov-12	29-Nov-12	30-Nov-12	14-Dec-12	28-Dec-12	10.000.000	4-Jan-13	9-Jan-13	
1.2.6.1.		Construct Health post	DHO	1	10.000.000	10.000.000	NCB	Post	Plan	28-Jan-13	18-Feb-13	25-Feb-13	25-Mar-13	26-Mar-13	9-Apr-13	23-Apr-13	10.000.000	30-Apr-13	5-May-13	
1.2.6.1.		Construct Health post	DHO	2	10.000.000	20.000.000	NCB	Post	Actual	25-Jan-14	15-Feb-14	22-Feb-14	22-Mar-14	23-Mar-14	6-Apr-14	20-Apr-14	20.000.000	27-Apr-14	2-May-14	
1.2.6.1.		Construct Health post	DHO	1	10.000.000	10.000.000	NCB	Post	Plan	2-Jun-14	23-Jun-14	30-Jun-14	28-Jul-14	29-Jul-14	12-Aug-14	26-Aug-14	10.000.000	2-Sep-14	7-Sep-14	
1.2.6.1.		Construct Health post	DHO	2	10.000.000	20.000.000	NCB	Post	Plan	25-Jan-15	15-Feb-15	22-Feb-15	22-Mar-15	23-Mar-15	6-Apr-15	20-Apr-15	20.000.000	27-Apr-15	2-May-15	
1.2.6.1.		Construct Health post	DHO	2	10.000.000	20.000.000	NCB	Post	Plan	2-Jun-15	23-Jun-15	30-Jun-15	28-Jul-15	29-Jul-15	12-Aug-15	26-Aug-15	20.000.000	2-Sep-15	7-Sep-15	
1.2.6.1.		Construct Health post	DHO	1	10.000.000	10.000.000	NCB	Post	Plan	25-Jan-16	15-Feb-16	22-Feb-16	21-Mar-16	22-Mar-16	5-Apr-16	19-Apr-16	10.000.000	26-Apr-16	1-May-16	
1.2.7.1		Fridges	DHO	5	200.000	1.000.000	RFQ	Post	Plan	1-Apr-13	22-Apr-13	29-Apr-13	27-May-13	28-May-13	11-Jun-13	25-Jun-13	1.000.000	2-Jul-13	7-Jul-13	
1.2.7.1.	19	Fridges	DHO	5	200.000	1.000.000	RFQ	Post	Plan	1-Jul-13	22-Jul-13	29-Jul-13	26-Aug-13	27-Aug-13	10-Sep-13	24-Sep-13	1.000.000	1-Oct-13	6-Oct-13	
1.2.7.1.	52	Fridges	DHO	5	200.000	1.000.000	RFQ	Post	Plan	1-Jul-14	22-Jul-14	29-Jul-14	26-Aug-14	27-Aug-14	10-Sep-14	24-Sep-14	1.000.000	1-Oct-14	6-Oct-14	
1.2.7.1.		Fridges	DHO	5	200.000	1.000.000	RFQ	Prior	Actual	1-Jul-15	22-Jul-15	29-Jul-15	26-Aug-15	27-Aug-15	10-Sep-15	24-Sep-15	1.000.000	1-Oct-15	6-Oct-15	
1.2.8.1.		Procure Furniture in health facilities	DHO	2	1.000.000	2.000.000	NCB\SSS	Prior	Actual	1-Sep-12	22-Sep-12	29-Sep-12	27-Oct-12	28-Oct-12	11-Nov-12	25-Nov-12	2.000.000	2-Dec-12	7-Dec-12	
1.2.8.1.		Procure Furniture in health facilities	DHO	1	1.000.000	1.000.000	NCB\SSS	Prior	Actual	1-Jul-13	22-Jul-13	29-Jul-13	26-Aug-13	27-Aug-13	10-Sep-13	24-Sep-13	1.000.000	1-Oct-13	6-Oct-13	
1.2.8.1.		Procure Furniture in health facilities	DHO	1	1.000.000	1.000.000	NCB\SSS	Prior	Actual	1-Apr-14	22-Apr-14	29-Apr-14	27-May-14	28-May-14	11-Jun-14	25-Jun-14	1.000.000	2-Jul-14	7-Jul-14	
1.2.8.1.		Procure Furniture in health facilities	DHO	1	1.000.000	1.000.000	NCB\SSS	Prior	Actual	1-Apr-15	22-Apr-15	29-Apr-15	27-May-15	28-May-15	11-Jun-15	25-Jun-15	1.000.000	2-Jul-15	7-Jul-15	
2.1.1.1.	1	Motor Vehicle Ambulances	DHO	2	23.000.000	46.000.000	NCB	Prior	Actual	22-Apr-12	13-May-12	20-May-12	17-Jun-12	18-Jun-12	2-Jul-12	16-Jul-12	46.000.000	23-Jul-12	28-Jul-12	
2.1.1.1.	11	Motor Vehicle Ambulances	DHO	1	23.000.000	23.000.000	NCB	Post	Plan	10-Apr-13	1-May-13	8-May-13	5-Jun-13	6-Jun-13	20-Jun-13	4-Jul-13	23.000.000	11-Jul-13	16-Jul-13	
2.1.1.1.	21	Motor VehicleAmbulance	DHO	1	23.000.000	23.000.000	NCB	Post	Plan	10-Apr-14	1-May-14	8-May-14	5-Jun-14	6-Jun-14	20-Jun-14	4-Jul-14	23.000.000	11-Jul-14	16-Jul-14	
2.1.1.1.	16	Motor Vehicle Ambulances	DHO	1	23.000.000	23.000.000	NCB	Post	Plan	10-Apr-15	1-May-15	8-May-15	5-Jun-15	6-Jun-15	20-Jun-15	4-Jul-15	23.000.000	11-Jul-15	16-Jul-15	
2.1.2.1.	10	Bicycle Ambulance	DHO	3	70.000	210.000	RFQ.	Post	Plan	14-Sep-13	5-Oct-13	12-Oct-13	9-Nov-13	10-Nov-13	24-Nov-13	8-Dec-13	210.000	15-Dec-13	20-Dec-13	
2.1.2.1.	15	Bicycle Ambulance	DHO	3	70.000	210.000	RFQ.	Post	Plan	14-Sep-14	5-Oct-14	12-Oct-14	9-Nov-14	10-Nov-14	24-Nov-14	8-Dec-14	210.000	15-Dec-14	20-Dec-14	
2.1.2.1.	20	Bicycle Ambulance	DHO	2	70.000	140.000	NCB	Post	Plan	12-Sep-15	3-Oct-15	10-Oct-15	7-Nov-15	8-Nov-15	22-Nov-15	6-Dec-15	140.000	13-Dec-15	18-Dec-15	
2.1.3.1.	3	Motor bike Ambulance	DHO	2	5.000.000	10.000.000	NCB	Post	Plan	7-Oct-12	28-Oct-12	4-Nov-12	2-Dec-12	3-Dec-12	17-Dec-12	31-Dec-12	10.000.000	7-Jan-13	12-Jan-13	
2.1.3.1.	18	Motor bike Ambulance	DHO	1	5.000.000	5.000.000	NCB	Post	Plan	1-Jun-13	22-Jun-13	29-Jun-13	27-Jul-13	28-Jul-13	11-Aug-13	25-Aug-13	5.000.000	1-Sep-13	6-Sep-13	
2.1.3.1.	18	Motor bike Ambulance	DHO	1	5.000.000	5.000.000	NCB	Post	Plan	1-Jun-14	22-Jun-14	29-Jun-14	27-Jul-14	28-Jul-14	11-Aug-14	25-Aug-14	5.000.000	1-Sep-14	6-Sep-14	
2.1.3.1.	14	Motor bike Ambulance	DHO	1	5.000.000	5.000.000	NCB	Post	Plan	1-Jul-15	22-Jul-15	29-Jul-15	26-Aug-15	27-Aug-15	10-Sep-15	24-Sep-15	5.000.000	1-Oct-15	6-Oct-15	
2.1.4.2.		Procure Communication System	DHO	1	4.500.000	4.500.000	NCB	Prior	Actual	1-Apr-13	22-Apr-13	29-Apr-13	27-May-13	28-May-13	11-Jun-13	25-Jun-13	4.500.000	2-Jul-13	7-Jul-13	
2.2.2.1.	2	Pushing biocycles for H.SA	DHO	275	30.000	8.250.000	NCB	Post	Plan	28-Sep-12	19-Oct-12	26-Oct-12	23-Nov-12	24-Nov-12	8-Dec-12	22-Dec-12	8.250.000	29-Dec-12	3-Jan-13	
2.1.2.1.	13	Pushing biocycles for H.SA	DHO	275	30.000	8.250.000	NCB	Post	Plan	4-Dec-12	25-Dec-12	1-Jan-13	29-Jan-13	30-Jan-13	13-Feb-13	27-Feb-13	8.250.000	6-Mar-13	11-Mar-13	
2.2.3.1.	9	H.SA.Equipment	DHO	1	17.000.000	17.000.000	NCB	Post	Plan	10-Oct-12	31-Oct-12	7-Nov-12	5-Dec-12	6-Dec-12	20-Dec-12	3-Jan-13	17.000.000	10-Jan-13	15-Jan-13	
3.1.1.2.		Public Health Office at DHO renovated	DHO	1	7.000.000	7.000.000	NCB	Post	Plan	12-Aug-12	2-Sep-12	9-Sep-12	7-Oct-12	8-Oct-12	22-Oct-12	5-Nov-12	7.000.000	12-Nov-12	17-Nov-12	
3.1.2.1.	2	Public Health Office Equipped	DHO	2	500.000	1.000.000	RFQ	Post	Plan	12-Aug-12	2-Sep-12	9-Sep-12	7-Oct-12	8-Oct-12	22-Oct-12	5-Nov-12	1.000.000	12-Nov-12	17-Nov-12	
3.1.4.1.	2	Motor Cycles	DHO	2	3.000.000	6.000.000	NCB	Post	Plan	5-Dec-12	26-Dec-12	2-Jan-13	30-Jan-13	31-Jan-13	14-Feb-13	28-Feb-13	6.000.000	7-Mar-13	12-Mar-13	
3.1.4.1.		Motor Cycles	DHO	2	3.000.000	6.000.000	NCB	Post	Plan	3-Mar-13	24-Mar-13	31-Mar-13	28-Apr-13	29-Apr-13	13-May-13	27-May-13	6.000.000	3-Jun-13	8-Jun-13	
3.1.4.1.	17	Motor Cycles	DHO	2	3.000.000	6.000.000	NCB	Post	Plan	3-Jun-13	24-Jun-13	1-Jul-13	29-Jul-13	30-Jul-13	13-Aug-13	27-Aug-13	6.000.000	3-Sep-13	8-Sep-13	
3.1.4.1.	22	Motor Cycles	DHO	2	3.000.000	6.000.000	NCB	Post	Plan	7-Aug-13	28-Aug-13	4-Sep-13	2-Oct-13	3-Oct-13	17-Oct-13	31-Oct-13	6.000.000	7-Nov-13	12-Nov-13	
3.1.4.1.		Motor Cycles	DHO	2	3.000.000	6.000.000	NCB	Post	Plan	2-Jun-14	23-Jun-14	30-Jun-14	28-Jul-14	29-Jul-14	12-Aug-14	26-Aug-14	6.000.000	2-Sep-14	7-Sep-14	
3.1.4.1.		Motor Cycles	DHO	2	3.000.000	6.000.000	NCB	Post	Plan	1-Sep-14	22-Sep-14	29-Sep-14	27-Oct-14	28-Oct-14	11-Nov-14	25-Nov-14	6.000.000	2-Dec-14	7-Dec-14	
3.2.3.2.		Computer lab established at the hospital	DHO	1	5.000.000	5.000.000	NCB	Post	Plan	1-Sep-13	22-Sep-13	29-Sep-13	27-Oct-13	28-Oct-13	11-Nov-13	25-Nov-13	5.000.000	2-Dec-13	7-Dec-13	
3.3.1.2.		Install internet services and computers	DHO	2	1.000.000	2.000.000	RFQ	Prior	Plan	4-Nov-12	25-Nov-12	2-Dec-12	30-Dec-12	31-Dec-12	14-Jan-13	28-Jan-13	2.000.000	4-Feb-13	9-Feb-13	
3.3.1.2.		Install internet services and computers	DHO	3	1.000.000	3.000.000	RFQ	Prior	Plan	3-Jan-13	24-Jan-13	31-Jan-13	28-Feb-13	1-Mar-13	15-Mar-13	29-Mar-13	3.000.000	5-Apr-13	10-Apr-13	
3.3.3.1.		VHR	DHO	874	5.721	5.000.000	NCB		Actual	3-Sep-12	24-Sep-12	1-Oct-12	29-Oct-12	30-Oct-12	13-Nov-12	27-Nov-12	5.000.000	4-Dec-12	9-Dec-12	

Annex 11. Operational guidelines for Education and Research Fund

Education Fund:

The fund will be administered in line with the human resource development policy for the public health sector.

1. Funding will be provided for both pre-service and in-service training
2. In-service training will be short term and long term training.
3. The training committee will be responsible for doing needs assessment and coming up with a 5 year training plan(in progress)
4. The training committee will be responsible for shortlisting candidates and submitting the list to the selection committee
5. For short term trainings will be approved by the district management team .
6. The selection committee will have the following members:
    a. 1 representative from ICEIDA
    b. 1 representative from District council
    c. 1 representative from the zonal health office
    d. 1 representative from DHMT
7. Selection of trainees shall be based on equitable gender balance, geographical distribution taking into account existing urban and rural inequities.
8. The candidates will be notified by the office of the DC and they will sign a bond of 3 years with the district council. (see standard operating procedure an example of a bond. This same one can be adopted)
9. The scholarship will include the tuition fees, book and upkeep allowance (this needs to be discussed on the rates to be used. Selection will be done bi-annually for the long term trainings and as required for the short term trainings.
10. There will be at least 5 beneficiaries at a point in time for long term trainings with funds permitting.
11. See further standard operating procedures for more information

Research fund:

1. The research fund will fund for operational research and other research which will help to deal with unresolved health problems in Mangochi
2. The number of research to be funded will be atleast 5 at a given period of time or depending on availability of funds.
3. The research committee will be responsible for coordinating research to be done. The research cpmmittee will be comprised of:
    a. RESEARCH COORDINATOR
    b. 2 MEMBERS FROM DHMT
    c. 1 REPRESENTATIVE FROM COLLEGE OF MEDICINE
    d. MONITORING AND EVALUATION OFFICER
    e. REPRESENTATIVES FROM DEPARTMENTS:clinical,admin,nursing,environmental
    f. Representative from DC’s office

4. The research proposals will be submitted to the committee which will then submit to the DHMT, DC, and MOH headquarters for approval.
5. The principal investigators for the research will be the staff at Mangochi district health office
6. The results of the projects will be submitted to the following
    a. ICEIDA
    b. DHMT
    c. DC
    d. ZONAL HEALTH OFFICE
    e. MOH HQ
7. There will be annual dissemination of the research findings to relevant stakeholders.
8. The college of medicine will be the technical advisors to the research committee.

TRAINING BOND

THIS INDENTURE made the …… day of …… **BETWEEN MANGOCHI DISTRICT COUNCIL** (hereinafter call district council) of the one part **AND** ……(hereinafter call the student) of **Postal Address** ……..of……..**Village, Traditional Authority** …… **Distric**t …….. of the other part.

WHEREAS by an agreement made between the DISTRICT COUNCIL and ……, the said…… agree, inter alia, to grant assistance by way of underwriting further education or technical training of students to be in the service of district council for the purpose of improving the standard and efficiency of such service and it was agreed that the Ministry selected such student for such training.

AND WHEREAS pursuant to the above-cited arrangement the Ministry has agreed with the student to financially support and enable him/her to enter upon a Certificate/Diploma/Degree/Masters/PhD course of study in ……..... ..... (Hereinafter called the course) at …… (Hereinafter called the institution) which the said Student has agreed to pursue.

AND WHEREAS the said student has agreed with the district council that Upon the completion by him/her of the said course, he/she shall serve for a period of not less than two years from the date of completion of the said

course as the district council may, in accordance these present require, deploy him/her to any health facility with the district council or return to duty station.

AND he/she has further agreed with district council that in the event of his/her breach of agreement by his deliberate failure or refusal to continue and remain in the service of district council for the required period or by his/her leaving the required service, without the prior consent of the district council before the expiry of such period, he/she or his/her new employer shall be bound for the payment to the district council of all amounts paid to or on behalf of the student pursuant to this agreement to which the district council all amounts paid to or on behalf of the student pursuant to this agreement leading to the right in the district council try so to demand recovery or repayment of any sums so computed as liquidated damages.

NOW THIS INDENTURE WITNESSETH as follows:

1. The district council agrees with the student:-
    a. Subject to these presents to allot and expend on behalf of the student such sum of sums as in the opinion of the district council, will be reasonably necessary to enable the said student to attend, pursue and complete the said course;
    b. To pay the said sum referred to in paragraph (a) to or on behalf of the said student in such installments and upon dates and at such places as the district council may deem fit;
    c. To allow for one resit in the course of one's training programme;
    d. To utilize employee in there are expertise;
    e. To warn the student as per provision of MPSR wherever appropriate.

2. THE STUDENT agrees with the district council :-
    a. Diligently to apply himself/herself to all studies and other work assigned to him/her in relation to the said course during the period thereof.
    b. Neither to change the field of study nor extend training programme without prior consent of the district council :
    a. To commence the requisite journey to the institution above-referred to in good time to ensure his attendance at such institution on the date and at the time for his attendance, and to proceed thereto without any unnecessary or unwarranted stop-overs or delays, save as agreed to beforehand by the district council;
    b. Upon the completion by him/her of the said course, to work to return to duty station and to report to the district council for duty as soon as

may be applicable and remain in the service of the district council for a period not less than two years.

Provided that nothing contained in this agreement shall be construed as imposing any ability on the district council to settle any debt incurred by the student or to provide the student with employment, to continue to employ the student for any particular period or in particular capacity.

c. In the event of his breach of this contract by his/her deliberate failure or refusal to join, continue and remain in the service of the district council for the period, if any, required of him/her in accordance with paragraph (d) or by his leaving the said service, without the prior consent of the district council, before the expiry of such period, the said student hereby agrees and consents to bound for the payment by him/her to the district council of a sum of money as agreed liquidated damages for such breach, which sum to comprise of the totality of any of the following expenses incurred for and on behalf of the said student:-

i. Tuition fees as prescribed by the institution;
ii. Salary paid while on course including top-up allowance;
iii. Research allowance;
iv. Any other allowance paid while on training.
v.

IN WITNESS WHEREOF the said parties hereto have hereunto set their hands and seals the day and year first above written. **SIGNED, STAMPED AND DELIVERED** on behalf of the **district council** by;

Name ……..)

STUDENT

Signed ……)

In the presence of

Name ……..)

Signed ……)

On behalf of the district council

Name ……)

Signed ……)

Title ……..)

In the presence of

Name ……..)

Signed ……)

Title ……..)

Annex 12: Institutionalization of Village Health Registers in Mangochi District

A document submitted by the Public Health Office, Mangochi District

INTRODUCTION

A Village Health Register is a community data collection tool that was introduced in Malawi in 1998 after it was piloted in the three districts of Kasungu, Mwanza, and Mzimba . The introduction of Village health register was introduced to have reliable village health data that would assist in serving the following purposes:

- To monitor equity of EHP service provision at household and community level
- To help in the design of a monthly plan of activities at community level like Home visit, Village clinic, Public facility inspection, Outreach clinic, Village feedback meetings.

In Mangochi, the registers were introduced in 2007 when all Health Surveillance Assistants (HSAs) were briefed on the use on the use of the tool. This was followed by the collection of baseline data.

PROBLEM STATEMENT

- The evaluation of the initial baseline data show a lot of inadequacies More than 50% of the H.S.As did not fill the registers properly
- Supervisors for H.S.As were not trained in the tool and did not know therefore how to fill the register. There was therefore no supervision
- There were inadequate HVR hand books. Three or more H.S.As were therefore sharing one hand book that was delaying the updating process.
- The data collected was not being analysed and shared with partners
- The data collected in the VHR was not being used because many stakeholders did not know about the tool.

Currently, only 4 health centres (10%) of Mkumba cluster are still having their registers updated. This can be attributed to the intervention that was made by Emmanuel International Organization that was strengthening structures and data management at community level in Mkumba Cluster.

The resultant of the situation has been that we do not have an updated village level data in the district that is impacting negatively on health decisions at community level.

SIGNIFICANCE OF VHR INSTITUTIONALIZATION IN MANGOCHI DISTRICT

The Malawi Ministry of Health has just started implementing the 2011-2016 Health Sector Strategic Plan (HSSP) that has much emphasis on promotion of community health interventions. This will require that evidence in terms of data at community level should be available to guide on the health needs at community level. The institutionalization of VHR in Mangochi will help in providing accurate and reliable data on the critical health indicators in the district.

BROAD OBJECTIVE

The main objective is to institutionalize the implementation of Village Health Registers in Mangochi district by December, 2014.

SPECIFIC OBJECTIVES

- To increase knowledge and skills in health workers in the implementation of Village Health Workers
- To Improve management of community data

ACTIVITIES

1. Training of health workers on VHR
2. Procure VHR
3. Collect baseline data using VHR
4. Conduct an operational research comparing the facilities that are currently performing better in VHR against those that are not performing well
5. Develop data base for VHR
6. Orient Stakeholders on VHR
7. Conduct Review meetings on VHR
8. Conduct Supervision on VHR

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