Mid-Term Review of Clinton Foundation HIV/AIDS Initiative's Program for Scaling-Up of Prevention of Mother-To-Child Transmission of HIV (PMTCT) Services in Tanzania

NORAD COLLECTED REVIEWS 20/2009

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October 2009

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ACRONYMS

AIDS - Acquired Immune Deficiency virus
ANC – Ante-Natal Care
ARV – Ante-Retroviral (drugs)
ART – Anti-Retroviral Treatment
BMAF - Benjamin William Mkapa HIV/AIDS Foundation
CBHCP – Community Based HBC provider
CCHP - Comprehensive Council Health Plan
CDC – Center for Disease Control
CHAF – Community HIV/AIDS Fellow
CHAI - Clinton Foundation HIV/AIDS Initiative
CHMT - Council Health Management Team
CMAM – Community based management of acute malnutrition
CMO – Council Medical Officer
CSOs - Civil Society Organizations
CTC – Care and Treatment Center
CTX – Cotrimoxazole
DACC – District AIDS Control Coordinator
DBS DNA PCR technique
DCD - Deputy Country Director
DHIS - District Health Information System
DMO – District Medical Officer
DRCHCO – District Reproductive and Child Health Coordinator
EGPAF - Elizabeth Glaser Pediatric AIDS Foundation
EID - Early Infant Diagnosis
FBO – Faith Based Organisation
FDC – Fixed Dose Combination
HBC - Home Based Care
HIV - Human Immunodeficiency Virus
HMIS - Health Management Information System
HRH – Human Resource for Health
IEC - Information Education and Communication
JHPIEGO - Johns Hopkins Program for International Education in Gynaecology and Obstetrics
JICA – Japan International Cooperation Agency
M&E - Monitoring and Evaluation
MoHSW - Ministry of Health and Social Welfare
MSD - Medical Stores Department
MTEF – Medium Term Expenditure Framework
NACP – National AIDS Control Program
NTPI - Norway-Tanzania Partnership Initiative
NVP - Nevirapine
OPD - Outpatient Department
PEP - Post Exposure Prophylaxis
PITC - Provider Initiated Testing & Counseling
PLHA - People Living with HIV/AIDS
PMTCT – Prevention of Mother-to-Child Transmission
RCH – Reproductive and Child Health
RHMT - Regional Health Management Teams
RI - Rural Initiative
RHMT – Regional Health Management Team

RMO – Regional Medical Officer
RNE – Royal Norwegian Embassy
RSDN - Rahman Social Development Network
RUTF – Ready-to-Use Therapeutic Food
SAM – Severe Acute Malnutrition
sdNVP – Single dose Nevirapine
TASAF - Tanzania Social Action Fund
TDHS – Tanzania Demographic and Health Survey
TFNC – Tanzania Food and Nutrition Center
TGPSH - Tanzanian German Programme to Support Health
ToT – Training of Trainers
VSO - Voluntary Service Overseas
WHO – World Health Organization

EXECUTIVE SUMMARY

Background

Since July 2005, Clinton Foundation HIV/AIDS Initiative (CHAI), a program of the William J. Clinton Foundation (Clinton Foundation) has been collaborating with the Tanzanian Ministry of Health and Social Welfare (MoHSW), the Regional and Council Health Management Teams (RHMTs and CHMTs) in Mtwara and Lindi regions of Tanzania to expand rural access to HIV/AIDS Care and Treatment services. From July 2007, the Government of the Kingdom of Norway through the Norwegian Ministry of Foreign Affairs and the Royal Norwegian Embassy (RNE) in Tanzania initiated financial support to program to allow expanding the scope to include the scaling up prevention of mother to child transmission of HIV (PMTCT) services in Lindi Region. The main goal of the program is "to provide universal access to high quality PMTCT services to pregnant women in the Lindi region and expand access to HIV/AIDS care and treatment services to eligible HIV+ children and adults in Lindi and Mtwara regions by December 2010". Major program activities include facility renovation, human resource capacity building through recruitment and training, task-shifting, provision of HIV drugs and commodities, support for supply chain management, early infant diagnosis (EID), laboratory strengthening including sample transportation systems, and community based activities to improve coordination between health facilities and community home based care.

The mid-term review should focus on progress to date, according to set targets at program activity and output levels in order to enable the program to better understand implementation process successes and challenges, "lessons learned" and areas for focus in the second half of the grant period. The mid term review also includes a value for money audit of selected interventions. Furthermore, the partners agreed to take the opportunity to do an assessment of the potential for CHAI becoming a more active partner in improving management, budgeting and planning for scaled up quality MNCH services, as well as become involved in a wider scope of activities related to improving maternal and child health, i.e. in scaling up quality and quantity of lifesaving interventions before, during and after delivery.

Context

The challenges related to the delivery of health services in general and of HIV/AIDS services in particular are considerable. Among the major ones are lack of qualified human resources in facilities and in management; sub-standard performance of existing staff; weak infrastructure in terms of lack of water and electricity, long distances between facilities and low road standards; low standard in hospital buildings with little space and neglected maintenance; lack of modern and adequate equipment and stock out of essential medicine and generalised poverty among communities. Moreover, there is also a lack of capacity and competency in the health management and limited economic resources available. This has dire effects to CHAI that has the intention to use the existing national system for management, monitoring and provision of health services. Thus, progress and success of its program depend largely on elements and actors external to the program.

Program design

An overall development goal has not been formulated for this program although one may assume that the goal is to reduce MTCT and morbidity and mortality related to HIV/AIDS. Consequently on cannot assess to what degree objectives and activities are relevant to the overall goal. The program has a set of objectives defining what is to be achieved within the end of the program period in 2010 and related targets for what shall be achieved in 2009. The review team finds that the objectives and targets are overlapping and in several cases the targets are not linked to the corresponding objective in a logical manner. We recommend a revision of the objectives and to introduce a proper goal hierarchy with a better link between goals, objectives and indicators and a

clearer distinction between inputs and outputs and between qualitative and quantitative aspects. There is also a need to formulate objectives for M&E and for increasing the quality of PMTCT and CTC services.

CHAI: organisation and resources

All development partners met during field work are almost exclusively positive in their comments about CHAI and the way the program is managed. In particular it is very much appreciated that CHAI is intending to use and strengthen the government system rather than setting up a vertical program and that CHAI is collaborating with and understanding the needs of local partners. That CHAI is not only offering training and commodities but also contributes to improving the infrastructure in terms of buildings, solar power, etc is equally commended. Some concerns were raised in terms of technical expertise that CHAI possess and offers at regions level. There is also a need to continue efforts to incorporate CHAI activities in council health plans, build capacity in CHMTs and to provide more technical assistance to RHMTs. It is recommended that CHAI seek to strengthen its capacity by reconsider the qualifications the staff at regional level needs in order to be influential in efforts to strengthening health systems and to consider offering more expert technical assistance.

Infrastructure

A major part of the budget has been spent on improving infrastructure in facilities providing PMTCT and care and treatment services. This has mainly consisted in constructing and renovating buildings, providing solar power and providing new furniture. This is very much appreciated both by staff working in the facilities that have been upgraded as well as by district health management. Staff declared that it has led to increased uptake of services although no data exists indicating to what degree this is the case. A number of challenges related to this have been identified such as the involvement of different sectors in the implementation, lack of expertise and capacity in engineering, low quality of contractors and a certain replication of efforts made by other development partners. For the future building competency in CHMTs in assessing needs and budgeting for infrastructure investments and maintenance will be crucial for program sustainability.

PMTCT and CTC

The major achievement of the program has been the rapid and tremendous scale up in making PMTCT and care and treatment services accessible to people living in the two regions. This has led to a huge increase of people enrolled in PMTCT programs and registered in CTC centres. However, in terms of results and impact the situation is more mixed. In the best case only six out of ten pregnant HIV positive women identified in ANC have come back for prophylaxis. How many of those who have received a *complete* course of HIV prophylaxis during pregnancy, labour and delivery is not known. In terms of preventing mother to child transmission little data exist but figures presented in reports indicate only a modest success: almost one out of five (17,6%) of the HIV exposed infants tested four weeks after the delivery were found to be HIV positive. Very few children have been tested more than once but this is largely due to the fact that the program has not been running long enough to have children included who have reached 18 months of age (and been weaned). Counselling and follow up of breast feeding mothers is found to be weak and will necessarily lead to more children being infected by their mothers. Moreover, counselling about contraception and the benefits of family planning in general and in particular for HIV positive parents is not paid much attention to in the CHAI program and staffs do not appear to be well trained in family planning counselling.

A critical period for PMTCT is during labour and delivery. The numbers are not clear about how many of the women found to be HIV positive in ANC are coming back to deliver with skilled attendance at a facility. However, it is known that about half of the deliveries in Tanzania are done

at home. CHAI has tried to address the issue but introducing some measures such as improving infrastructure and equipment in maternities, offering pregnant women incentives for delivering at a facility, offering TBAs incentives for bringing pregnant women to facilities. According to staff met these interventions has led to an increased number of women coming to deliver at the facilities. However, the introduction of new interventions seems not to be based on systematic assessments of local barriers to uptake and monitoring has been too weak to enable an estimation of the impacts and what other factors that may have contributed. The major barrier for many women appears to be long distances and lack of transport. There are plans for addressing this issue but details and progress is not known. At lower level facilities there are frequent stock outs of essential medicine for obstetric care and a continuous lack of qualified and skilled staff.

Concerning CTC a major achievement besides training staff in the provision of treatment and care has been to improve the transport of CD4 counts. Other important contributions have been to secure the provision of ARV medicine in cases where there has been a risk of stock outs and to offer Paediatric Fixed Dose Combinations for children in need of ART. There are some anecdotal evidence and indications that quality of the services is not optimal in terms of handling side effects of ARV medicine, treating opportunistic infections and identifying patients in need of second line treatment. However, there is again a lack of reliable data due to weak monitoring.

Human resources

CHAI has introduced an innovative measure to recruit new personnel by guaranteeing a salary the first three to six months for some key staff employed by the government. This has made it possible to recruit six persons serving Sokoine Regional Hospital and Nyangao Mission Hospital. CHAI has also recruited data clerks who are in charge of collecting and cleaning PMTCT data and assisting facilities in improving routines for registering and compiling data. This has reportedly resulted in reports being submitted more frequently in time and with fewer errors.

In terms of human resource the major contribution of the CHAI program may have been to train staff in the provision of PMTCT and care and treatment for PLWH. By supporting training of trainers (ToT) and cascade district training much more staff is available with basic competency in provision of program related services. Staffs doing ToT meet certain challenges in terms of colleagues who are not very motivated to be trained by a colleague on the work and missing allowances. There are also concerns about the resulting quality of the training and supervision. As indicated above the quality of the services do not appear to optimal. However, training needs and impact of the training is not monitored or systematically assessed. Supervision is supposed to be done in collaboration between RHMTS, CHMTS and CHAI. Supervision does occur but not on routine manners and there is a need for more technical supervision and advice by experts in clinical issues.

A distinct feature of the CHAI program has been the recruitment of Community HIV/AIDS Fellows (CHAF). These are people with non-medical university degrees who are working in facilities for one year supported with a stipend. Their main responsibility is supposed to be to link facilities with communities through outreach activities, sensitization and follow up of defaulting patients. It is reported that they do succeed at times in tracking and bringing back defaulters but numbers are not known. The CHAFs report they meet certain challenges such as lack of transport and people asking for rewards and sometimes find the outreach difficult and de-motivating. Consequently some CHAF tend to prefer working in the facility where they may help with non-clinical tasks but also testing and counselling of patients. Their assistance is very much appreciated by regular staffs who find them helpful in reducing the work load. The CHAFs, however, are not trained for this and there are concerns about the standards of the work they do. There is a need to look critically on the outreach activities and how to better link with and support Home Based Care volunteers and TBAs.

The task shifting program under CHAI includes use of expert patients who are healthy People Living with HIV/AIDS (PLWHs) and working in PMTCT and CTC facilities both in Lindi and Mtwara. It was learnt that in some places the expert patients had not been paid for the past two months, some patient experts complained that the allowance/payment was very low. Some expert patients are given responsibilities they are not supposed to have, particularly when regular staff is absent. The patient expert program is quite unique and useful but CHAI needs to ensure that it is well documented as a program with clear indicators and means of monitoring and evaluating the program.

Conclusion

The CHAI program has made considerable and commendable achievements in a short span of time. Among the most important is the scaling up of CTC and PMTCT services and training in staff in providing these services allowing many more people to have access to life saving care, treatment and medicine. Other important achievements are the contributions to infrastructure improvements and better transport of CD4 samples.

The programs has not had a defined overall development goal. It can be *assumed* that the goal has been to reduce mother to child transmission of HIV and to reduce HIV related morbidity and mortality. Particularly for the PMTCT services it seems like the lack of a goal has translated in to a program design where important elements in comprehensive PMTCT services have been neglected, notably prevention of pregnancies, follow up of mothers after delivery and their newborn children and in general quality aspects of services.

There is a critical lack of monitoring and reliable data needed to assess the impact of the program and to address problematic issues related in particular to the quality of the services offered. No data is presented concerning the percentage or number of HIV infected women identified in ANC who have received complete course of ARV prophylaxis in ANC and maternity. Likewise, data is not available about the proportion of patients who have started on ART who are lost to follow up or proportion of patients alive and with a high drug adherence. When these figures are not known (or not presented) the success of the program in terms of preventing mother to child transmission or in reducing mortality among PLWH cannot be properly assessed. The figures that do exist indicate only a modest success in PMTCT indicating a strong need to refocus on improving the quality of the services and the performance of the staff rather than continuing the rapid expansion.

Recommendations

Program design

- Revise the objectives and targets to improve the correspondence between objectives and targets and to make them more consistent.
- Set up a proper goal hierarchy including an overall development goal and indicators (preferably guided by a conceptual framework).
- Focus more on increasing the quality of services as compared to expansion in terms of numbers of staff and facilities providing PMTCT and care and treatment.

Monitoring and health information systems

- Strengthen the M&E system with a particular focus on monitoring the performance and training needs of staff, effect of new interventions and quality of services.
- Improve monitoring and reporting on essential indicators such as compliance with PMTCT and ARV treatment and HIV status of infants.
- Introduce regular assessments of staff situation, performance and training needs.

- Monitor and supervise more closely and regularly the CHAF

PMTCT

- Address more systematically the challenge of attracting HIV+ women to facilities for delivery including systematic assessments of barriers to uptake of services and monitoring the effect of innovative interventions such as incentive packets.
- Improve counselling about and follow-up of breastfeeding.
- Offer training in family planning counselling and support provision of contraception.
- Strengthen program elements for the testing of children through a closer follow up of mothers and newborns and assessments of staffs' performance and training needs.
- Strengthen outreach and community work and seek new ways to improve links between facilities and HBCs and TBAs.

Care and Treatment Centres

- Improve monitoring, supervision and training related to side effects of ART, treatment complications, opportunistic infections and second line treatment.
- Offer training in family planning counselling and support provision of contraception.

Human resources

- Assess regularly and systematically training needs and impact of training
- Reconsider qualifications needed for CHAI staff at regional level
- Review job descriptions for and use of data clerks and regional level
- Strengthen monitoring and supervision of expert patients
- Provide expert technical assistance for PMTCT and ART
- Strengthen monitoring and supervision of CHAF

Efforts to address the needs for health systems strengthening should not move beyond what is currently included: improving infrastructure, training and supervision of staff, monitoring and DHIS. The challenges within the provision of comprehensive quality PMTCT and CTC services are so considerable that the priority should be to strengthen existing program elements rather than expansion into new areas.

The need to focus on strengthening the existing program is also valid concerning the possibility to take on more MNCH focus. However, the success of a PMTCT program is largely depending on the quality of maternal and newborn health services. Efforts to improve delivery services and outreach in order to attract pregnant HIV+ to facilities for delivery and post natal follow-up will necessarily also benefit HIV negative women and their children. Moreover, if well monitored lessons learned from the PMTCT program will be of use for the improvement of MNCH services in general.

1 INTRODUCTION

1.1 Background

Since July 2005, Clinton Foundation HIV/AIDS Initiative (CHAI), a program of the William J. Clinton Foundation (Clinton Foundation) has been collaborating with the Tanzanian Ministry of Health and Social Welfare (MoHSW), the Regional and Council Health Management Teams (RHMTs and CHMTs) in Mtwara and Lindi regions of Tanzania to expand rural access to HIV/AIDS Care and Treatment services. From July 2007, the Government of the Kingdom of Norway through the Norwegian Ministry of Foreign Affairs and the Royal Norwegian Embassy (RNE) in Tanzania initiated financial support to program to allow expanding the scope to include the scaling up prevention of mother to child transmission of HIV (PMTCT) services in Lindi Region.

The main goal of the program has been formulated to be “to provide universal access to high quality PMTCT services to pregnant women in the Lindi region and expand access to HIV/AIDS care and treatment services to eligible HIV+ children and adults in Lindi and Mtwara regions by December 2010”. From July 2007 through December of 2007 the primary focus was on expanding access to HIV/AIDS care and treatment services and preparations of interventions to scaling up PMTCT services. The PMTCT scale up in Lindi began in January 2008 with full implementation underway in July of 2008. Major program activities include facility renovation, human resource capacity building through recruitment and training, task-shifting, provision of HIV drugs and commodities, support for supply chain management, early infant diagnosis (EID), laboratory strengthening including sample transportation systems, and community based activities to improve coordination between health facilities community home based care.

According to the agreement between the Norwegian Ministry of Foreign Affairs (MFA) and the Clinton Foundation, a midterm review of the program focusing on progress to date and the effectiveness of the program should be carried out in the second quarter of 2009. An assessment of the programs impact may also be included in the review. During the second annual meeting between the Royal Norwegian Embassy (RNE) and CHAI agreed to conduct and complete the mid term review between August - October of 2009. The mid-term review should focus on progress to date, according to set targets at program activity and output levels. This will enable the program to better understand implementation process successes and challenges, “lessons learned” and areas for focus in the second half of the grant period. The mid term review also includes a value for money audit of selected interventions (annex 3).

The mid-term review is an opportunity to have an external assessment of the program’s implementation process so far. Understanding both successes and challenges in program activities and outputs thus far will increase the program’s ability to achieve the goal of reducing HIV transmission to newborns and enrolling HIV positive women, children and their partners in care and treatment services through the PMTCT+ program in Lindi region and improving the quality and quantity of HIV/AIDS care and treatment services in Lindi and Mtwara regions to date since implementation began in July 2007.

Furthermore, CHAI and the Royal Norwegian Embassy have started discussions on the possibility of broadening the cooperation in Lindi and Mtwara to include a sharper focus on activities related to reduction of maternal and child mortality. The partners therefore agreed to take the opportunity of the mid-term review to do an assessment of the potential for, and appropriateness of, CHAI becoming a more active partner that can contribute to improving management, budgeting and planning for scaled up quality MNCH services, support the improvement of critical health infrastructure, support procurement and supplies management for MNCH commodities and help

address health worker shortages in the area of maternal and child health in key districts of Lindi and Mtwara, as well as become involved in a wider scope of activities related to improving maternal and child health, i.e. in scaling up quality and quantity of lifesaving interventions before, during and after delivery.

The in-country review commenced 19th of August 2009 and was completed by 3rd of September 2009.

1.2 Objectives and scope of review

According to the Terms of Reference (see annex no 1) the objectives of the mid-term review were as follows:

- Assess the progress in implementation of program activities as identified in the program design/proposal and modified during implementation as reflected in the work plans.
- Assess the appropriateness, relative efficiency and effectiveness in terms of implementing program activities, including an assessment of the planning and programming.
- Assess the outcomes of the program to date on the quantity and quality of key aspects of PMTCT services in Lindi and HIV/AIDS care and treatment services in Lindi and Mtwara.
- Determine whether the program is on track to achieving its overall goals of contributing to reducing mother to child transmission of HIV and increasing access, quality and utilization of HIV/AIDS care and treatment services.
- Identify lessons learnt that can benefit the program implementation.
- Assess the potential and appropriateness of CHAI becoming a more active partner in addressing health system aspects like worker shortages, management, planning and budgeting, procurement and supply management for comprehensive MNCH service delivery in the area of maternal and child health in all districts of Lindi and Mtwara
- Assess the potential and appropriateness of CHAI becoming involved in a wider scope of activities related to improving maternal and neonatal health

The scope of the review should include:

- The extent to which the specific objectives, benefits and impacts are being addressed through specific program activities and outputs. The objectives of the program are as follows:
  - To expand the number of health facilities providing PMTCT services in Lindi region to 120 by December 2010
  - To increase uptake of PMTCT services in Mtwara and Lindi by December 2010
  - To provide high quality PMTCT services to 85% of pregnant women in Lindi by December 2010
  - To expand access to HIV/AIDS Care and Treatment services in rural areas and provide ART to 60% of all eligible PLHAs in Mtwara and 52% of all eligible PLHAs in Lindi by December 2010
  - To strengthen health systems in Lindi and Mtwara and integrate activities for scaling up access to comprehensive HIV/AIDS services within district plans by December 2010
- The views and experience of groups who have benefited from, been involved in, or been affected by the activity wherever possible
- Identify any shortcomings or challenges during the program implementation
- Assess key contextual factors influencing program implementation, including local infrastructure and capacity
- Review and propose necessary actions to ensure long-term sustainability of the program

- Propose options for the evolution of the program and how this might be achieved through appropriate re-orientation (to take on more MNCH focus). Consider new possible linkages and partnerships particularly with governmental and non-governmental actors working on MNCH.
- Identify and consolidate lessons learnt (operational and developmental)
- Assess the financial management of the program, including an assessment of the "value for money" aspect and the unit costs for the main activities.

The last point was realized by a separate assessment by financial consultant Mr Kailas Bhattbhatt from BakerL Tilly DGP & Co. The complete report from this assessment can be found in annex 3.

1.3 Methodology

All program documents – plans and reports - have been carefully reviewed. Additional information was sought trough interviews with a range of stakeholders, managers, health staff and patients. Before and after the field trip meetings were held with stakeholders in Dar es Salaam including representatives for the Ministry of Health and Social Welfare, the Reproductive and Child Health program, National Aids Control Program, TACAIDS, Medical Stores Department, WHO, Benjamin Mkapa AIDS Foundation, University of Dar es Salaam, Central Disease Control, Elisabeth Glaser Pediatric AIDS Foundation and CHAI. At regional level meetings were held with the Regional Health Management Teams in both Lindi and Mtwara. At council level the review team met with the Council Medical Officers in Ruangwa, Nachingwea, and Kilwa in Lindi and in Ligula and Tandahimba in Mtwara. Two regional hospitals, three District Hospitals, two health centres and X dispensaries were visited and interviews conducted with staff at PMCTC and CTC services as well as with staff in maternity clinics. Interviews were also made with CHAFs and a small number of "expert patients" and ordinary patients.

Providing PMTCT and CTC services is a complex matter and the interviews with partners, management and staff were dealing with many issues such as the staff situation and motivation (including economic incentives); supervision and mentoring; routines for registers, compiling, reporting and using data; infrastructure including buildings, water and energy; drugs and commodity supplies and routines and systems for procurements; financial resources and priority setting; referral and transport; outreach activities; barriers for access to services; the role of TBAs and home based care volunteers; coordination of development partners; the value and the progress of the CHAI programs and suggestions for improvements; etc. Several of these issues are so complex by themselves that they could be a subject for a separate study. The scope and ambition of this review was not to deal with any of them in depth but rather to map out the multiple challenges and shed light on some of the numerous factors that are influencing the successes and failures in the implementation of the program.

A challenge in any review of this type is to obtain the honest and real opinions and feelings of the informants. The review team felt most people met were speaking quite openly. Staff at facilities was in most cases interviewed without the presence of any staff from CHAI or the health management in order to make interviewees feel comfortable and welcome to voice critical views. However, it is clear that in general many are not used to openly criticize authorities, raise discussion about problems or even to articulate their feelings about their work situation. This culture limits to a certain degree the sort of information that is accessible through interviews but does not seriously affect the validity of the findings. As we will come back to this is a challenge not only to reviewers and researchers but also to program and staff managers who may not be provided with crucial information needed to make critical adjustments and corrections.

Baker Tilly DGP & Co realized a financial management and value for money assessment through

- Group meetings with CHAI's Management, Stake holders, Financial management staff & other agencies & individuals.
- Review of MoU & agreements, program document, periodic budget, monthly progress reports, audited financial statements, accounting system of CHAI and related documentation, and budgetary control system.
- Field visit to take stock of activities on the ground.

2 CONTEXTUAL BACKGROUND

2.1 Health services, HIV/AIDS and maternal health

The Mtwara and Lindi regions are situated in the southeast corner of Tanzania with a coast facing the Indian Ocean. **Lindi** region has a total population of 904 017 persons. The region is divided administratively into five districts with six councils and 28 divisions. The region has nine hospitals (3 run by FBOs), 17 health centres (1 FBO) and 162 dispensaries (6 FBO, 2 private). **Mtwara** region has a total population of 1,1 million persons (2002) and also has five districts with six councils. Information about the health services in Mtwara were not provided.

The **HIV/AIDS prevalence** was in 2003/04 estimated to be 3,6 % in Lindi and 7,4 % in Mtwara as compared to 8,7% at national level. This makes Lindi one of the regions with lowest HIV prevalence whereas Mtwara is among those with highest prevalence ranking fourth among the 21 regions.[1] Immune suppression caused by HIV has allegedly become the most frequent cause of death among people above five years of age followed by pregnancy complications whereas malaria is by far the most common cause of death for those under five years

According to table 1, maternal mortality appears to be quite low both in Mtwara and Lindi region as compared to the national average which currently is at 578/100,000 per live births[2]. However there are uncertainties about the figures which are only estimates.

[1] The highest rates are found in Mbeya (13,5%) and Iringa (13,4%) followed by Dar es Saalam (7,4%).
[2] URT, Ministry of Health and Social Welfare; Annual Health Statistical Abstract, 2006

Table 1: Maternal Mortality Ratios in Mtwara and Lindi regions.[3]

Region	District	MMR *	% People living below poverty line**
Mtwara	Mtwara District	119/100,000	37
	Newala District	121/100,000	43
	Tandahimba District	266/100,000	34
	Masasi District	189/100,000	37
	Mtwara Municipal	-	38
Lindi	Lindi Rural district	166.3/100,000	51
	Nachingwea	186/100,000	41
	Liwale	484/100,000	38
	Ruangwa	279/100,000	30
	Lindi Urban	-	18
	Kilwa district	-	35

Source:
*Comprehensive Health Plans of District Councils for the year 2006/2007
** URT Poverty and Human Development Report, 2005

2.2 Access to CTC and PMTCT

Lindi region started to provide PMTCT services in June 2005. In 2007 149 health providers offered PMTCT services in 61 health facilities. Mainly do to the contribution of the CHAI program the region had in June 2009 been able to scale up the number of facilities offering PMTCT to 151.

Table 2: Number of women tested and found to be HIV+ in Lindi region[4]

Period	Number of women tested in ANC		Percentage of HIV+ women
2007	15981		
2008	20861		4,5%
January - June 2009	11945		3,9%

The scale up of CTC services is much slower. By the end of July 2009 there was in all 38 facilities in Lindi that had a CTC. 9708 persons had been enrolled in care (680 children) and 4013 were on ART.

By July 2009 the cumulative number of persons in **Mtwara** region ever enrolled in the Treatment & Care program was 13 332. Out of these 6 296 has started on ARV treatment (2156 men and 4149 women).[5] This can be compared to 1756 persons able to receive ARV in December 2007.

[3] Warioba, Christine M.: Second draft report on the study in the cooperation and coordination on reproductive health with particular focus on maternal mortality at district level. C & S Development Consultants, Dar es Salaam, 2007.
[4] Annual Report 2008.
[5] Source: CTC update Mtwara, CHAI, August 2009.

2.3 External factors and challenges on the ground

In assessing the progress and impact of a health service program such as the CHAI program it is necessary to understand the context where the program is operating. The gaps and needs in the health systems of the two regions are considerable. Among the most evident and important are

- Lack of qualified human resources in facilities and in management.
- Sub-standard performance of existing staff due to lack of training and motivation, frequent absences, high turnover and weak management.
- Weak infrastructure in terms of lack of water and electricity, long distances between facilities and low road standards.
- Low standard in hospital buildings with little space and neglected maintenance.
- Lack of modern and adequate equipment and stock out of essential medicine.
- Generalised poverty among communities

These are weaknesses and challenges that can be found in various degrees, forms and combinations in most developing countries. More specifically one of the problems identified during the review team's field visit is that the regional and district managements to a certain degree are handicapped by a lack of capacity and competency. It's a matter both of low numbers in management staff and in some cases the qualification to meet required responsibilities and tasks. High absence among management staff is another problem due to frequent training, meetings and travels (too often training and travels are not relevant for the responsibility of the staff, e.g. during our review in one of the districts, a District Medical Officer (DMO) was absent because of training in acupuncture in China for a period of three months). At the council level the limited human and financial resources combined with poor planning and prioritization is a threat to the sustainability of the CHAI program. If CHAI has to phase out due to finances, it is doubtful that the councils will be able to ensure successful continuation.

Since the 1996 Local Government Reform Programme, Tanzania has committed itself to a policy of "decentralisation by devolution" to improve service delivery and empower local communities. The regional level has to a large degree been incapacitated as a consequence of the decentralisation process since resources and decision making has been devolved to council level. In relation to the councils the RHMTs are largely reduced to supervision and has no or very limited authority in terms of coordinating development partners, correcting weaknesses in program design and implementation or even malpractice. The realism is that RHMTs have been left with unclear management of the regional hospitals and urban district councils, where these hospitals reside. This has dire effects to CHAI which is using the existing national system for management, monitoring and provision of health services. Thus, progress and success of its program depend largely on elements and actors external to the program

3 PROGRAM DESIGN

3.1 Assessment of goals, objectives and targets

The first step in program management is to set up a plan including specified goals and objectives, a formulation of what can be expected in form of outputs and outcomes, and an identification of what will be needed in form of inputs. What exactly are the goals and objectives of the CHAI program is somewhat confusing, partly due to the fact the goals and objectives have not been consistent over time.

Program goals
In the original program description from October 2007 the project **goals** were described on page 8 as

(1) roll-out a community-focused PMTCT strategy to achieve universal PMTCT coverage in Lindi and further increase the number of people enrolled in HIV/AIDS care and treatment,
(2) support the GOT in rolling out this strategy to other regions, including Mtwara
(3) strengthen health systems and expand access to HIV/AIDS care, treatment and supportive services in rural areas of Lindi and Mtwara region to ensure a continuum of care for men, women and children with HIV/AIDS

In the first annual report from February 2008 the **goals** were formulated as follows:

- Expand access to HIV/AIDS Care and Treatment for people living with HIV in Mtwara and Lindi with the target to provide ART to 4000 people within 23 facilities in Lindi and 6000 people within 44 facilities in Mtwara by June 2008.
- Increase the number of health facilities providing both CTC and PMTCT services from 22 to 44 in Mtwara and from 8 to 23 in Lindi and provide outreach services to rural health centers and dispensaries
- Assess the status of health infrastructure for provision of CTC and PMTC services in Lindi and Mtwara and initiate renovation of health facilities requiring immediate attention, including provision of solar power and water collection systems
- Provide training for health care workers, community health workers and expert patients
- Support the national testing campaign
- Support Regional and Council Health Management Teams in Lindi and Mtwara to develop and integrate in the Comprehensive Council Health Plans activities to scale up services for HIV/AIDS care and Treatment and PMTCT.

These goals are very different from the three goals listed in the initial program document. However, only the first two of these six goals include a description or quantification/specification of a target. The other four goals are rather description of activities and do not indicate any expected achievements in terms of outcome or impact.

In the second progress report from July 2008 it says that the **main goal** of the program "is to provide universal access to high quality PMTCT services to pregnant women in Lindi region and expand access to HIV/AIDS care and treatment services to eligible HIV+ children and adults in Lindi and Mtwara region by December 2010".

One may *assume* that the overall goal of the program is reduced transmission of HIV and reduced HIV prevalence and consequently to contribute to the achievement of MDG 6 for Tanzania. However, it is rather problematic that an overall goal for the program has never been formulated because as will be seen later in this report it has programmatic implications. As it stands, it appears that expanding access to PMTCT is an objective in itself without reference to how this must relate to a package of initiatives that together can lead to reduced HIV transmission and prevalence.

Program objectives
When it comes to the objectives these have been clearly spelled out but have changed over time and are not consistent across the various documents.

In the proposal dated October 2007 the objectives were as follows:

1. Provide universal coverage of PMTCT services in Lindi by 2010

2. Increase the quality of PMTCT services in Lindi by 2010
3. Establish system for managing PMTCT roll-out to other regions.
4. Strengthen health systems in Lindi and Mtwara region to facilitate scaling up of HIV/AIDS Care and treatment services to rural areas

In the 3 year work plan for the period up to December 2010 (Excell-sheet) the objectives were

1. Provide universal coverage of PMTCT services in Lindi and Mtwara by 2010
2. Increase the quality of PMTCT services in Lindi by 2010.
3. Establish an effective system for managing PMTCT services.
4. Demonstrate significant reduction of MTCT through quality PMTCT services within a rural setting.

The introduction of an objective related to impact in terms of reduction of transmission rates is interesting but unique. This has not been found in any other document. Neither are the annual reports estimating any impact in that sense.

In the second progress report from 2008 the objectives were

- To provide high quality PMTCT services to 85% of pregnant women in Lindi by December 2010
- To expand access to HIV/AIDS Care and Treatment Services in rural areas and provide ARVs to 52% new eligible People Living with HIV/AIDS (PLHAs) in Lindi to 60% new eligible PLHAs in Mtwara by December 2010
- Assess the status of health infrastructure for provision of CTC and PMTC services in Lindi and Mtwara and initiate renovation of health facilities requiring immediate attention, including provision of solar power and water collection systems
- Provide training for health care workers, community health workers and expert patients
- Support Regional and Council Health Management Teams in Lindi and Mtwara to develop and integrate in the Comprehensive Council Health Plans activities to scale up services for HIV/AIDS care and treatment and PMTCT.

By this the second objective from 2007 of *increasing* the quality of PMTCT services seems to have been abandoned. This may have been unfortunate since there are indications that the quality of the services have suffered from the focus on quantity and rapid scale up.

Subsequently the objectives were revised again in the annual meeting between RNE and CHAI in July 2008 and in the January – December 2009 Work Plan Narrative the objectives were:

1. To expand number of health facilities providing PMTCT services in Lindi region to 120 by December 2010.
2. To increase uptake of PMTCT services in Mtwara and Lindi by December 2010.
3. To provide high quality PMTCT services to 85% pregnant women in Lindi and Mtwara by December 2010.
4. To expand access to HIV/AIDS Care and Treatment services in rural areas and increase the number of PLHAs on ART from 5,400 to 8,400 in Mtwara and from 3,000 to 5,500 in Lindi by December 2010.
5. To strengthen health systems in Lindi and Mtwara and integrate activities for scaling up access to comprehensive HIV/AIDS services within district plans by December 2010.

The major change was to introduce an objective concerning the *number* of facilities providing

PMTCT and to leave out an objective related to training of health workers including expert patients.

Under these objectives there are for each a set of targets that in most cases are specified and indicating concretely what should be achieved by the end of year 2009.

A common way to assess program objectives is to ask whether they are SMART.

1. **S**pecific – Objectives should specify what they want to achieve.
2. **M**easurable – You should be able to measure whether you are meeting the objectives or not.
3. **A**chievable - Are the objectives you set, achievable and attainable?
4. **R**ealistic and **r**elevant– Can you realistically achieve the objectives with the resources you have? Are they relevant in relation to the overall goal?
5. **T**ime – When do you want to achieve the set objectives?

The concept comes from marketing discipline but has become popular in other areas especially in the context of development programs. Using this concept, the objectives of the CHAI program are quite specific in the sense that they quickly give the reader a precise idea about what the organisation seeks to achieve. Objective number two do not specify in itself a goal but targets one and two works as indicators for the objective. The first four objectives are also measurable as quantitative indicators are given. One may ask however, how to measure that "high quality" services are provided. For this there is a need for indicators on quality which do not seem to be defined. For the fifth objective about strengthening health systems, it is even more problematic. It is difficult to measure achievement of the targets under objective five and there are no indicators for the measurement of the degree "HIV/AIDS services [are] effectively planned, managed and integrated in CCHPs" and "HIV/AIDS related commodity management [has] improved". The objectives have so far proved to be achievable and realistic. Two of them have already been fulfilled and could actually have been more ambitious. Assuming that the overall goal is to reduce MTCT and death and morbidity caused by AIDS the objectives may also be judged as relevant. The time frame is also set and it is specified when the objectives as well as the targets should be reached.

All the objectives are formulated in such a way that they do not relate to how the situation was when the program started. Norad pointed out in a desk appraisal of the program proposal that the lack of baseline data makes it difficult to know to what degree the program contributes to an *improvement* of the situation. To expand, increase and improve may be good objectives but a judgement of the *appropriateness* of the programme can only be based on progress in relation to the initial situation.

The objectives are very much related to each other and there are overlaps to an extent of confusing which targets belong under which objective. Some of the targets are not linked to the objective in a logical manner. The first target under objective 1 is about assessing and improving infrastructure. The improvement of the infrastructure is strictly speaking not necessary in most cases for expanding the *number* of facilities providing PMTCT. However, it does contribute to improvement of the *quality* and the attractiveness of the services and thus the target fits better under objective 3 but also contributes to increased uptake as in objective 2.

Target 2 under objective 2 is presumably related to the uptake of delivery services among all women and not only among HIV+ women. Although increased uptake in general would normally lead to increased uptake also among the HIV+ there should be a target specifying the percentage of HIV+ women seen at ANC who come back to deliver at a health facility with skilled attendance providing prophylaxis for mother and child. As we will see in the next chapter to make the HIV+ pregnant women understand the need for prophylaxis and skilled delivery attendance is a major

challenge.

The targets under objective 3 concerning provision of quality services are formulated in such a way that they are rather indicators of uptake of services and as such more relevant for objective 2. Target 1 states the percentage (70%) of HIV positive women attending ANC receive efficacious ARV regimen for prophylaxis or treatment during and after delivery by December 2009. The *quality* aspect of this target is the provision of *efficacious regimen* as compared to single dose Nevirapine but the main issue is the percentage of women attending ANC who receive prophylaxis. Moreover, it should be specified that the prophylaxis is received monthly during the pregnancy and during labour and delivery. Target 2 is about identifying and testing HIV exposed infants and is by consequence not about providing services to pregnant women as the objective states but about how many women are bringing the babies back for testing (compliance). Target 3 about identifying and re-enrolling lost women is rather about outreach activities than provision of quality PMTCT services.

An indicator that the objectives and corresponding targets are somewhat inappropriate is that the annual report does not follow the structure of the objectives and targets but is adapting a new that mainly reports on cross cutting issues of all objectives: infrastructure, human resource capacity building, increased uptake and quality of PMTCT services, expanding access to CTC, strengthening health systems. This makes it difficult to assess the program in terms of its objectives and targets as specified in the plans.

3.2 Conclusion and recommendations

In conclusion, there is a need for a goal hierarchy with a more logical link between objectives and targets/indicators and a clearer distinction between inputs (equipment, staff, etc.), outputs (e.g. training offered, investment in infrastructure) and outcomes (e.g. uptake of services, increased capacity and competency) and between quantity/scale (e.g. number of services providing PMTCT, number of persons trained) and quality (e.g. level of competency, compliance rates, drug supplies and equipment in facilities).

In order to formulate a more clear set of goals, objectives and indicators we recommend to develop a conceptual framework and a strategic plan for the CHAI program.

As discussed in chapter X below there is a need to strengthen the Monitoring & Evaluation system. The program does not include objectives or targets related to M&E. We recommend that this is included for the next program period.

We recommend that an objective related to *increasing the quality* of services is re-introduced with adequate indicators for the next program period.

We suggest to replace Target 1: 70% of HIV positive women attending ANC, during and after delivery receive efficacious ARV regimen for prophylaxis or treatment by December 2009 (under objective 3) by the following more precise indicator: *Number of infected pregnant women who received complete course of ARV prophylaxis in ANC and maternity* (with target 80% of HIV+ women identified in ANC).

For CTC and ART (objective 4) we suggest to use as indicators *Proportion of those ever started who are lost to follow up*, and *Proportion of patients alive with 95% drug adherence*.

4 CHAI: ORGANISATION AND RESOURCES

4.1 Feed back on CHAI and the program

The CHAI program and other support from CHAI appear to be very much appreciated at all levels. Every person met during field visit stated that the support provided by CHAI made a great difference and that most of what has been achieved in scaling up PMTCT and CTC would not have been realized without this program. Staff in facilities was highly appreciative of the contributions in terms of provision of furniture, equipment and electricity from solar panels.

Council and regional management praised the way CHAI was involving them in their work and aligning the program with those of the government. From the level of regional management to staff at the lowest facility level it was repeatedly stated that CHAI demonstrates a good understanding of the situation and the needs of the partners. CHAI is working through and with the regional and district authorities and is not bypassing or overruling them. Thus, the interventions are filling real gaps and the organisation is not pushing its own program or agenda in disregard of local needs and plans (something which other organisations are accused of doing).

Other good comments were that CHAI demonstrates flexibility in the approach allowing adaptation of the interventions or the investments when critical needs are discovered and reported. It is also highly commendable that CHAI is not only providing training as many other organisations but also investing in infrastructure.

There were some concerns in terms of the technical expertise that CHAI was offering particularly with staffing in the regions levels. During the review, one of the partners met in Dar es Salaam raised considerations about the qualifications of the CHAI at regional level. Given the support that CHAI wants to offer especially in critical functions of supervision of the various program elements including identifying and addressing obstacles and challenges met by the staff who is actually providing the services, would require a certain level of seniority and skills. This partner in particular raised sceptic views as to the skills and expertise of the current staffing in Lindi and Mtwara. Further, during the review, in discussion with some of the medical doctors, they also mentioned CHAI's role to be limited to logistics and not the technical expertise as they would have expected. The review did not get information about what sort of expertise would be particularly appreciated so this would need some further enquiries to be specified. CHAI has the ambition to support and strengthen the CHMTs and RHMTs. This requires quite high technical expertise and a certain level of authority in order to be able to give adequate advice and be taken serious.

4.2 Contribution in health system strengthening

The current objective 5 for the CHAI program is to strengthen health systems in Lindi and Mtwara and integrate activities for scaling up access to comprehensive HIV/AIDS services within district plans. Target 2 for 2009 was: "HIV/AIDS services effectively planned, managed and integrated in CCHPs of all districts of Mtwara and Lindi regions by December 2009" and Target 5 was "Program management and technical support provided by CHAI to RHMT and CHMT in Lindi and Mtwara".[6]

In progress report no. 3 covering 2008 it is claimed that as a result of interventions from CHAI "all PMTCT activities in Lindi and HIV/AIDS Care and Treatment activities in Lindi and Mtwara district were incorporated into the comprehensive council health plans for 2008/2009". The review

[6] Activities related to Target 1 about collection and use of HIV/AIDS related information is discussed in chapter 9 on Monitoring & Evaluation, target 3 on commodity management is discussed in chapters 6 on PMTCT and 7 on CTC.

team had access to all the CCHPs from Lindi region for 2008/2009 and the activities run by CHAI related to HIV/AIDS services do not seem to be included in the plans. E.g. the training and infrastructure improvements realized by CHAI did not appear. The problem may be, however, partly in terms of presentation because the plans in most cases do not indicate who is funding and/or implementing the various activities. According to CHAI staff in Mtwara and Lindi they meet with certain challenges when trying to encourage the inclusion of CHAI activities in the CCHPs. One is different time frames with CHAI following the calendar year for planning and budgeting whereas the councils' fiscal year goes from July to June the consecutive year. This complicates the integration of CHAI activities into the council plan. Another challenge is apparently a lack of willingness: "some districts don't cooperate". Anyhow, efforts are still needed to make sure CCHPs *clearly* incorporate CHAI activities as well as activities implemented by other INGOs.

In terms of strengthening the CHMTs and RHMTs it was difficult to get a hold on what exactly is the contribution from CHAI. The progress report no 3 states that

> "CHAI provided program management support to the Regional Health Management Teams (RHMTs) and Council Health Management Teams (CHMTs), supporting the supervision, program planning and execution processes. Regular supportive supervision was conducted by the Mtwara RHMT while Lindi RHMT has conducted annual planning and evaluation meetings for HIV/AIDS service provision. The Mtwara and Lindi district annual plans have been incorporated in the comprehensive council health plans (CCHP) for July 2008-June 2009. Additionally, CHAI co-sponsored a team from Mtwara region to undertake a study visit to Ethiopia where they explored the integrated rural health program and the hospital management project" (p.15)

The support provided to "the supervision, program planning and execution processes" appears to basically consist of participation in planning meetings. The review found that the RHMTs and even more so the CHMTs have considerable challenges related to lack of resources, both in terms of number of staff and their qualifications and in terms of resources needed to fill their responsibilities. The CHMTs lack both qualified staff and resources to be effective. Whereas the RHMTs include competent and experienced senior health personnel their capacity is limited by lack of resources for travelling and supervision, weak information systems and limited time and capacity to hold them self updated about the situation on the ground.

4.3 Financial management

The financial management assessment (see annex 3) concludes that "considering the quality of management of CHAI and their commitment to the project, Norwegian funds are in safe hand and are being used diligently" and furthermore that:

> The financial management of the program is also in the hands of good management and qualified staff. Every effort is being made to optimize the returns and meet the budgets. Nevertheless, the review team identified a few weaknesses, which can be improved upon. The major ones with respect to financial management are to track the expenses to respective activities, track and ensure proper utilization of funds at the district levels.

In terms of value for the money the assessment found that tendering procedures were followed and it is to be presumed that the best option has been used (see also next chapter on infrastructure investments). Regarding solar installations CHAI called all four suppliers to do a pilot project and then selected on the base of performance and price. The main concern remains the *maintenance* of facilities and installations. The realisation of value for money in longer terms will depend on the ability of district authorities to ensure that there are funds and competency to maintain infrastructure and equipment and that it is used for its optimum useful life. Continuous efforts are needed to strengthen CHMTs in that sense.

4.4 Conclusion and recommendations

CHAIs support would partly need to be of a higher technical level, partly consist of offering more training based on assessments identifying what sort of competency is missing that could possibly make a difference in monitoring, planning, supervision and management. To ensure the long term sustainability of the program it needs to be more clearly incorporated in the CCHPs and the contribution of the partners must be clearly spelled out. Capacity building in the CHMTs and RHMTs will be important also in that sense in order to enable local authorities in managing the program. High staff turn over in management positions is a chronic problem and *institutionalisation* of knowledge and competency will be crucial. It is recommended that CHAI seek to strengthen its capacity by reconsider the qualifications of the staff at regional level need in order to be influential in efforts to strengthening health systems. We also recommend considering offering more expert technical assistance both to RHMTs, CHMTs as well as to facilities.

5 INFRASTRUCTURE

One of the core objectives of CHAI is to expand the number of health facilities providing PMTCT and CTC services in Lindi and Mtwara regions respectively. This has mainly involved training of health workers and provision of guidelines in principle. But during this process, CHAI realised that there was also a need to improve the work environment for provision of these services. Such kind of development lies within the jurisdictions of the district authorities and involves a tendering process to obtain appropriate contractors.

5.1 Achievements

To date, CHAI's involvement in infrastructure improvement has mainly been in; facility assessments, renovation and construction, supply of necessary equipments/furniture and installation of solar power.

Health facility assessments and renovations

Initial facility assessment in Mtwara was mainly conducted by one of the CHAIs senior officers from the main office, subsequent assessments have been carried out by an engineer under CHAI. Assessment in Lindi was mainly aimed at health facilities that were providing CTC services, in total 30 health facilities were assessed, and among these only a few qualified for repair. A special ranking process is used to categorise the health facilities after the assessment.

Among the facilities that were assessed in Lindi, 15 of them were earmarked for renovation. According to the progress report of January –December 2008, renovation of the Lindi Town RCH clinic had been completed, and during the review as reported by the RHMTs, renovation of seven health facilities in the region was completed, while 10 more were underway. Detailed water system assessments are planned in preparation for rehabilitation of water supply system in the identified 24 health facilities in Lindi providing PMTCT and CTC services.

In Mtwara region, similar efforts were observed, e.g. during the visits to Tandahimba Hospital, the review team was impressed with the OPD/CTC unit that was constructed by CHAI support. The unit was a very good example of integrated HIV/OPD services. Other infrastructure development in Mtwara include; The Mbawalachi water project, Sokoine RCH Newala District Hospital (CTC, conference room and pharmacy), Nangoo Dispensary, Nkomaindo hospital laboratory, Chiwale Health Centre, water gutters at Mangaka Health centre and Milola Dispensary.

A number of challenges were revealed in operationalising these activities, some of them are;

- The districts administrative set up and nature of implementation based on sector is a difficult one, as in this instance two different sectors are involved (health and infrastructure) which differ in priorities, mandates, management and implementation.
- Lack of expertise and capacity in the areas of engineering is also a major problem. As noted in other sectors, Lindi region as a whole is faced with limited capacity both in numbers and right qualifications.
- There is great variation between districts in relation to management which in reality is a major influence on implementation of activities such as infrastructure development.
- Quality of contractors that are ready to work in Lindi and Mtwara is low, mostly compounded with low costs contracts offered by CHAI and the hardship associated of working in very rural remote areas. As a result, in some instances CHAI has been forced to use contractors whose workmanship, leaves a lot to be desired.
- In the past CHAI has often tendered small pieces of work to a number of small contractors, this had the implication of higher transaction costs and sub contraction of smaller companies with limited capacities. The plan now is floatation of tenders in groups of work and thus increasing volume of work which can attract potential contractors.
- Similar with other health activities, infrastructure development in regions as well as districts is also uncoordinated and at times can be competitive. A clear example is the case of between CHAI and Abbot Fund in relation to the renovation/construction works at Ligula hospital. In trying to reduce duplication, CHAI has reached an agreement with Joint Rehabilitation Fund (JRF) not to duplicate efforts, however in reality JRF process is extremely bureaucratic and hence making it impossible to meet its joint milestones, which at times can be a setback to CHAIs efforts.

Furniture assessment:
Furniture needs assessment has also been carried concurrently with the infrastructure assessment, through a ranking process devised by CHAI. Initially, after the assessment, funds were allocated to districts to purchase the required furniture. However this process was not very successful, due long bureaucratic processes in the districts and thus leading to delays. Currently, CHAI purchases and delivers the furniture after the assessment is accomplished. According to the report from CHAI, a total of 24 health facilities in Lindi were identified in need of furniture, 9 of them were already furnished and the process was continuing for the remaining facilities. Type of furniture that are supplied include; waiting benches, desks, chairs etc.

Provision of solar power:
One of the biggest problems of rural health facilities both in Mtwara and Lindi has been the lack of electricity as they are not connected to the electrical power grid found in the region and district towns. Due to the mere fact that electricity has a major influence on service delivery and ultimately utilisation, CHAI decided to invest in solar power installation as the best alternative in the interim. According to the progress report No 3 for the period of January–December 2008, solar power system were installed in 29 health facilities and some health centres and dispensaries, including staff houses. This also included training on back stopping in the localities as well as at regional and district levels. This was also followed up with an assessment of the 12 health facilities which had solar power installed to see its impact. During the review, visits were also made to health facilities that had received this intervention. It was apparent how important this intervention was, especially

in some of the very remote areas with limited access e.g. the Kipatimu Mission Hospital.

The staffs were very appreciative of this intervention and declared to have observed increased service use of the facilities particularly in the night. However, the team did not really feel the commitment from the district level in terms of maintaining this vital infrastructure. For example, in one of the visited dispensaries in Kilwa, there existed a solar unit that was installed by JICA in an old building and since relocating to a new building next to the old one, the district has not taken the effort to reinstall the solar from the old to the new building. Inquiries from the district did not provide any relevant or justifiable responses. [7]

5.2 Tendering and value for money

Tendering procedures in the districts are usually bureaucratic and long. In negotiation with the districts, CHAI's has innovated a means through which these hurdles are reduced whilst implementing activities related to infrastructural development. A core team consisting of a CHAI's engineer, Districts'' Medical Officer (DMO) and District Engineer is responsible for evaluating and selecting eligible companies for contracts in relation to CHAI's renovation and construction.
The selection of eligible companies is limited to floating tenders within districts accompanied with head hunt or review of previous companies with good profiles and track records, and thus shortening the whole process.

In terms of value for the money the assessment found that tendering procedures were followed and it is to be presumed that the best option has been used. Regarding solar installations CHAI called all four suppliers to do a pilot project and then selected on the base of performance and price.

The main concern remains the *maintenance* of facilities and installations. The realisation of value for money in longer terms will depend on the ability of district authorities to ensure that there are funds and competency to maintain infrastructure and equipment and that it is used for its optimum useful life. Continuous efforts are needed to strengthen CHMTs in that sense.

5.3 Conclusion and recommendations

The investment in infrastructure and equipment is both very much needed and very much appreciated. The assessment and tendering procedures seem to have been well managed all though there have been some bureaucratic obstacles. For the future building competency in CHMTs in assessing needs and budgeting for infrastructure investments and maintenance will be crucial for program sustainability.

6 PREVENTION OF MOTHER TO CHILD TRANSMISSION

6.1 Achievements

The achievements of the program in terms of scaling up <u>access</u> to PMTCT are commendable. According to the 2008 annual report:

> The number of facilities providing PMTCT services increased from 61 in December 2007 to

[7] According to the DMO who was aware of the case, there are five facilities in the district that have a solar power system stored waiting to be reinstalled. For the staff and patients the solar power represents a major improvement and it is frustrating to see functional equipment stored away

> 144 in December 2008 (83 additional facilities in 2008). (…) Also, the number of health care workers trained to provide PMTCT services increased from 149 to 269 in the same time period.

Consequently the program had already in 2008 surpassed its objective for December 2010 which was that 120 facilities should provide PMTCT.

However, the result and impact of this effort is more mixed. The reports are somewhat difficult to comprehend. Achievements in Lindi according to Annual report 2008:

- Increase of women tested from 16,000 in 2007 to 21,113 in 2008 (19,620 at ANC clinics and 1,493 in labor wards).
- Within the ANC, 98.7% of all pregnant women seen were tested for HIV, equaling 93% of all pregnant women that showed up in all health facilities with PMTCT services in Lindi
- 1,500 HIV + women were reached and 62% received prophylaxis for PMCT (increased from 22% in 2007).
- Uptake of ARV prophylaxis in labor and delivery increased to 65% (26% NVP and 39% efficacious regime).
- Uptake of ARV prophylaxis at ANC increased to 65% (39% sdNVP and 26% efficacious regime).[8]

Successful PMTCT depends on a continuum of care starting with prevention of unwanted and unintended pregnancies. This first element - prevention - is not covered by this program. There is no mention about the need for family planning and contraception in any program document.

Testing pregnant women

Concerning testing and identification of HIV+ pregnant women the HIV test for women coming for ANC has become routine at facilities offering PMTCT services:

> Within the ANC, 98.7% of pregnant women seen were tested for HIV, equaling 93% of all pregnant women who showed up at facilities with PMTCT services in Lindi in 2008.[9]

Prophylaxis during pregnancy

When it comes to the next steps concerning actual uptake of and compliance with PMTCT services the success rates are less impressive. The annual report 2008 reports 65% uptake of ARV prophylaxis in ANC and at Labour & Delivery, that "62% received prophylaxis for Prevention of Mother to Child Transmission (increased from 22% in 2007)" and that "1,500 HIV + women were reached". In addition to inconsistent figures it is not known how many come to every monthly appointment (compliance rates). There are no data presented telling whether these women have come only once or regularly to their appointments for monthly prophylaxis.

However, in the table on page 10 one can read that 749 women (all though it also says 1500 HIV+ pregnant women were "reached") were enrolled in PMTCT in 2008. Of these 193 (25.8%) received Nevirapine and 290 (38.7%) received the efficacious regime. This should mean that 266 (32.5%) out of 749 HIV+ pregnant women did not get any prophylaxis at all. This must be seen as a considerable loss. In addition we don't know what happened to the resting 751 HIV+ pregnant women that were "reached". It the total number of HIV+ pregnant women received in ANC was 1500 only 32.2% of them have received any prophylaxis at all.

In terms of real *uptake* of PMTCT services in the best case only six out of 10 have come back for

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[8] There is confusion about figures: in one paragraph it is reported that "62% received prophylaxis for Prevention of Mother to Child Transmission". In the subsequent bullet points it says that uptake of ARV prophylaxis increased both at ANC and in Labor & Delivery to 65%. Moreover, it is suspicious that the figures are exactly the same for prophylaxis at ANC and during L&D.

[9] Source: Annual report 2008.

prophylaxis, in the worst case only three out of 10. This is deleterious as low compliance and weak follow-up will lead to high rates of mother to child transmission of HIV.

Prophylaxis during labour and delivery
In the labour ward 865 were identified as HIV+. Of these 337 (38.9%) received Nevirapine, 223 (25.8%) received efficacious regime, and 189 (21.8%) received tail. This should mean that 13,5% of the women known to be HIV+ and seen in labour wards in facilities offering PMTCT did not receive treatment. There is no explanation for this number.

The target (target 1 under objective 3) related to this was that "70% of HIV positive women attending ANC, during and after delivery receive efficacious ARV regimen for prophylaxis or treatment by December 2009". "Efficacious" in this context means the new combined ARV regimen in stead of single dose Nevirapine. However, efficacious *treatment* requires good compliance before and during delivery and the program seems to be far from making 70% of the HIV+ women receiving this. We suggest replacing Target 1 by the following more precise indicator:

- *Number of infected pregnant women who received complete course of ARV prophylaxis in ANC and maternity* (target: 80% of HIV+ women identified in ANC).

After delivery
The next step is to provide prophylaxis to the newborn. Again the numbers are rather confusing. 118 HIV exposed infants were able to receive more efficacious regimen in accordance with the new national protocol

The table for 2008 states that:

Infants received NVP	396 (45.8%)
Infants discharged with tail	118 (13.6%)
Infants received Cotrimoxazole (CTX)	120 (13.9%)

The total number of children treated seems to be 634. If all the HIV+ 865 women seen at delivery got only one child each this means that 27% of their children did not get any prophylaxis. If the number of HIV+ pregnant women reached is 1500 as stated in the narrative then only 42.3% of the children were treated. No data presented is telling how many women got prophylaxis themselves and also had their children treated. Moreover, **there is no data concerning the percentage of women tested and found HIV+ in ANC who have both completed the prophylaxis treatment before and during delivery and who have had their children treated**. Until the program has been running such a long time that it is possible to have children tested after weaning **this number would be the main indicator of the progress and success of the program**. When this is number is not known (or not presented) it indicates a major weakness in the monitoring and reporting system.

Breastfeeding and follow-up
What comes after delivery is the need to protect the child from acquiring HIV through the breast milk.

> "Without specific interventions, HIV-infected women will pass the virus to their infants during pregnancy or delivery in about 15-25% of cases; and an additional 5-20% of infants may become infected postnatally during breastfeeding […] Breastfeeding may thus be responsible for one third to one half of HIV infections in infants and young children in African settings."[10]

[10] HIV transmission through breastfeeding : a review of available evidence : 2007 update. Geneve: WHO, 2008: 3.

Replacement feeding is commonly and successfully used in developed countries but a difficult alternative for poor women who cannot buy nutritious milk or even have easy access to clean and safe water. Studies have found that exclusive breast feeding followed by abrupt weaning after six months is highly effective and is recommended by WHO as a preventive measure in settings where replacement feeding is not acceptable, feasible, affordable, sustainable and safe.[11]

However, it is also known that most women encounter many problems when trying to practice this outside the context of research studies where they get very close follow up and strong support. Data concerning breast-feeding in this project is very scarce. According to a table in the annual report 400 out of 865 HIV+ identified in the labour ward was expressed as *intending* breast-feeding.

Staff met during field visits tended also to refer to women's statements about the intentions to exclusive breastfeeding. The women seem to be told by staff that they should choose between replacement feeding and exclusive breast-feeding. The majority opt for breast-feeding due to costs related to replacements. However, not many staffs were not able to elaborate upon problems the women may have in realizing this. The most common problem cited was that many (or most) women continued exclusive breast-feeding after six months. This was explained by the inability to buy replacement food. After repeated probing some staff confirmed that many women in reality mix breast-feeding with porridge even within the first six months.

Staff trained in PMTCT services should ideally be more proactive in helping the mothers in facing some of challenges related to this and monitor how they are doing. As it is they know very little about how the mothers are dealing with this, what challenges they are faced with and how many are able to or not able to practice exclusive breast-feeding or for how long. From international studies it is well known that exclusive breast feeding followed by abrupt weaning is very difficult because in most setting it is against the norm. Practicing this will lead family members and neighbours to ask questions and is particularly difficult for women trying to conceal their HIV status for husbands or other family members.

Testing the newborn children for HIV is the ultimate measure of success or failure for a project aiming at reducing mother to child transmission during pregnancy, delivery and the first months of the baby's life. The registers provided by the MOHSW for monitoring post-delivery HIV+ women has columns for testing of the children after four weeks, nine months and 18 months. Since this program started rolling out at full scale only during 2008 very few children born by mothers enrolled into the program have reached the age of 18 months. Moreover, provision of and training in EIT through DBS was scaled up only in 2008 and has been implemented in some of PMTCT facilities only in 2009. Anyhow, data available so far indicates only a modest success in terms of preventing mother to child transmission. Under the heading "Capacity building" the annual report 2008 states that "DBS samples from 433 HIV exposed infants (HEI) were collected tested using the DNA PCR technique". 76 (17,6%) of them tested positive. It should be noted that this is at the first test and that in most cases it will be quite some time before the mother will end breastfeeding. From the registers and interviews with staff it is clear that very few children have been tested more than once.

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The fact that there is a lack of data about compliance with the prophylaxis treatment, weak follow-up of and monitoring of breast-feeding mothers and few tested children is adding up to a situation

[11] One study found that about 4% of exclusively breastfed infants became infected through exclusive breastfeeding from six weeks to six months. (HIV transmission through breastfeeding : a review of available evidence : 2007 update. Geneve: WHO, 2008: 2).

where **it is not possible *at this point of time* to have an idea to what degree the program will succeed in PMTCT**. To be able to know compliance rates among HIV+ pregnant women and HIV incidence rates among newborn children *in the future* the issue of follow up of mothers and children both before and after delivery must be addressed much more consistently and with much better monitoring.

The ending point for a continuum of care for PMTCT services should be quality family planning counselling to make sure that HIV+ women and their partners can make a fully informed choice about whether to become pregnant again. Couples who possibly wish to stop having more children or who want to postpone next pregnancy should get extensive and if necessary repeated counselling about alternatives for contraception. Independent of their wishes and plans about having more children all the women and preferably also their partners should be educated about the advantages of limiting family size and they should all have access to free contraception or be referred to a nearby family planning clinic where they can obtain free or low cost methods. The CHAI program has no mention of post partum family planning counselling. Health workers met during field visits claim they counsel their patients about family planning but the staff has not been trained in this and it appears to be done without much enthusiasm or insistence and is not likely to have much impact on behavior.[12]

6.2 Attracting pregnant women to delivery services

A critical time for preventing mother to child transmission is during labor and delivery. With no intervention 10-15% of the HIV+ pregnant women will infect their child during labor.[13] HIV-positive pregnant women may require more complex and aggressive treatment for complications such as sepsis than other women. Women living with HIV may be more susceptible to obstetric complications such as post-partum haemorrhage, puerperal sepsis, complications of unsafe abortion and caesarean section.

At a national level 94% of pregnant women make at least one ANC visit although only 14% of pregnant women start ANC during the first trimester. However, only 47% of all births in Tanzania occur at health facilities. As indicated above the numbers are not clear concerning how many of the women tested and found to be HIV+ at ANC is actually coming back to deliver at a facility with skilled attendance. What is known is that among all women registered in ANC 62% is coming back to deliver in the Lindi region and 48% in the Mtwara region. The reasons for this quite large difference between the regions are not well known. The fact that Mtwara also has a higher HIV prevalence rate may indicate that the population in Lindi in general has better habits in terms of preventing health problems and in seeking health services. Anyhow, to make delivery facilities and obstetric services attractive, reduce barriers and sensitize the population about the need for skilled attendance is crucial to attract also the HIV+ pregnant women to the services.

It is not clear whether the CHAI program target of 60% facility deliveries in Lindi relates to the women seen in ANC or the total number of pregnant women in the region. The total number of deliveries in the region is an estimation extrapolated from census data. According to the annual report facility deliveries increased from 9,285 in 2007 to 13,339 2008 representing 63% of all women seen in labor and delivery and ANC.

<u>Improving maternal health services</u>

To reduce MTCT (and MMR) major efforts are still needed to motivate more pregnant women to deliver in the health facilities. Some of the barriers identified by the MTR team against facility

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[12] The review team was actually told that the last program for training health personnel in family planning counselling was offered by UNFPA in 1998 but has been informed later that refresher training has been provided in 2009.

[13] HIV transmission through breastfeeding: a review of available evidence: 2007 update. Geneve: WHO, 2008.

based delivery are:

- Long distances and lack of transport: In rural areas this appears to be the *major* problem. According to staff at RCH clinics most women in the areas near the facilities come to the facility to deliver. Long distances make women prefer to deliver at home and causes delayed arrival at hospital in case of complications.
- Costs: Services are free but in many places the women are asked to bring kangas (sheets), macintosh plastic sheets, soap, water, gloves or other necessary items. This represents a barrier as some cannot afford to buy what they are asked to bring whereas others think that if they have to bring such things they might as well deliver at home.
- Low facility standards: lack of space and privacy, absence of electric lighting and running water, old and missing equipment is de-motivating both for the pregnant women and for staff.
- Low service quality: frequent stock out of essential drugs lower the quality offered. Many studies have found that health staff's attitude is an important factor deterring potential patients as they feel they are treated badly and without respect. Staff interviewed claimed this was not a problem and particularly at lower level facilities the staff seemed very committed to their work. At the same time they were frequently requesting "motivation" indicating a certain discontentment with working conditions, be it salaries, work load, housing or other things.

CHAI has recognised the challenge and has introduced some measures to address the issue. First of all, as can be seen in the chapter on infrastructure, a heavy investment has been made in rehabilitation of buildings, equipping facilities with solar power, and in providing equipment such as furniture and delivery kits. One interesting "pilot" project has been to introduce in two districts incentives for the pregnant women to attract them to the health facilities for delivery. They are simply given a "gift pack" consisting of soap, baby oil, nappies and a "kanga" (a cloth). In many facilities they are asked to bring at least soap and a clean kanga themselves, something that becomes a barrier to uptake of services. By offering these objects the barrier is eliminated and an attraction put in place in stead. This has reportedly been a success and has led to an increase in the number of attended deliveries. However, it occurs that how strong the effect has been is difficult to estimate due to weak monitoring. In addition the implementation is flawed by inconsistent practices due to the "pack" not being offered as a packed packet but as loose items. In some places the women are given only some of the items with the result that the packet is less attractive or that the women receive less then what they were promised.

In other districts incentives have been introduced for TBAs who bring women in labour to the facility. This is also reported as having been successful in terms of an increased number of women coming for delivery. Again the monitoring seems not to be careful enough to enable an estimate of the effect or to know if there have been other factors who have contributed to increased uptake.

According to both facility staff and some patients met the main barrier for the highest number of women is the long distance and the lack of transport. A plan for starting to address the women's need for transport is mentioned in the annual plan for 2009 but details about this has not been given. During meetings plans for building maternity homes making it possible for pregnant women to come before labour were referred to but again no details have been brought forward. To improve the possibility for referring women with pregnancy and birth complications two ambulances has been provided by CHAI in Lindi.

Another issue mentioned quite a few times is the lack of tap water in many facilities. The pregnant women are asked to bring a bucket of water themselves. It may seem like a minor thing but may

constitute an important barrier when you have to travel many kilometres. Moreover, a facility that may lack both running water and electric light and is offering limited privacy is not an attractive place to go for delivery and many prefer to have a TBA assisting them at home.

To reduce the problem of distance the MTR team discussed other solutions such as making transport available and providing radio equipment to communities making it possible to call for transport. There are however no plans in that sense. Outreach and sensitization conducted by CHAFs is for the moment the only intervention (see sub-chapter 8.6 below).

In terms of improving maternal care and making services attractive the needs are far greater than CHAI's resources. A substantial number of dispensaries are still without electricity and have very limited space for consultations and medical care, are frequently out of stock of essential medicine and has very limited staff.

The overall impression is that new approaches to attract pregnant women to the facilities seem too improvised: they are not based on systematic appraisals of local barriers, they are not carefully monitored and documented, they are small scale, and there is little control over other factors that may increase or decrease the number of patients. The consequence is that little is known about the effectiveness and impact and whether these are measures that could or should be scaled up, cut out or modified.

6.3 Supplies of drugs for obstetric care

A critical issue for the quality of obstetric care is supplies of essential medicine such as ferro sulfate, magnesium sulfate, oxytoxin, misoprostol and drips. Whereas CHAI works with the districts and facilities to unblock the supply chain for ART medicine when needed there appears to be no such support for medicine necessary for quality maternal health services. The result is quite frequent stock outs particularly at the lower level facilities (dispensaries and health centers).

From the information obtained during this review it appears that the *main* problem is lack of competency at facility level in quantifying and forecasting the amount of drug needed. But there are also constraints and weaknesses in the procurement and supplies chain from the central MSD through the zonal MSD and to the district level contributing to delays in processing and delivering orders. One example given was the lack of space for stocks and small packing capacity at the zonal MSD in Mtwara. The CHMTs appears in many cases to be too passive when stock outs occur. In one case a paediatric ward in a district hospital had not had any drugs for two months. Why the hospital management and the CMO did not act firmly on this or were not able to correct the situation was not clear. One suggestion for CHAI could be to map out more systematically the bottlenecks in the procurement and supply chain in order to introduce interventions in collaboration with the CHMTs that could limit the problem.

6.4 Conclusion and recommendations

As noted above the CHAI goals and objectives have been formulated as providing “high quality PMTCT services”. However, no definition of *high quality* services is offered and it is unclear what it means and how it is understood. The program reports are focusing strongly on quantitative aspects - e.g. number of enrolled patients and new facilities offering treatment - and contain very sparse information concerning quality aspects of the services and program components. This has an implication both for priority setting, choice of approaches and methods, and for the possibility of assessing the progress of the programme. The only indicator of quality services found in program documents is the provision of the efficacious regimen in stead of Nevirapine. As discussed above

there is a lack of monitoring and data concerning quality aspects of the services.

Existing data indicate low compliance rates among pregnant HIV positive women, worrisome numbers of HIV+ positive children, very few children tested more that once, and weak post-partum counselling about breastfeeding and family planning. There is an urgent need to improve monitoring and collection of data about these issues and to improve supportive supervision of service providers.

It may be possible to define the characteristics of a high quality PMTCT service but we suggest that a more useful concept is *comprehensive* services. According to UNAIDS comprehensive PMTCT services should include:

> "Prevention of HIV transmission from mother to her baby while in the womb or during birth or infant feeding requires a comprehensive package of services that includes preventing primary HIV infection in women, preventing unintended pregnancies in women living with HIV, preventing transmission from pregnant women living with HIV to their infants, and providing care, treatment and support for women living with HIV and their families" (www.unaids.org).

This is a description of a continuum of care starting with primary prevention of HIV and the prevention of pregnancies and ending with treatment and support for women who have delivered and for their children and families. Not the least important in this perspective is to provide access to preventive measures such as condoms and contraception and quality education and counselling in that respect, an element that has not been integrated into the CHAI program.

7 CARE AND TREATMENT CENTRES

7.1 Achievements

Currently CHAI is responsible for the Care and Treatment Centre (CTC) program only in Mtwara. The program in Lindi was taken over by EGPAF in June 2009. This was not in the plans for 2009 by came as a result of EGPAF searching for a region where they could scale up CTC programs.

In 2008 access to HIV/AIDS Care and Treatment for rural populations in Lindi and Mtwara regions continued to expand, with 68 sites that include hospitals, health centres and dispensaries providing these services. As for the PMTCT services in Lindi, the scale-up in terms of accessibility and number of people enrolled is commendable. In 2008 it was reported that 4868 new patients were enrolled into care and 1980 were enrolled into ART in Mtwara. By June 2009 13 300 persons were enrolled and 6 296 had started on ARV in Mtwara region. This means that they are on the track to reach the objective for 2010 which is to increase the number of PLHAs on ART from 5400 to 8400. However, compliance rates are not known beyond rather anecdotal evidence that staff is reporting few problems with patients not coming back for medicine and control. This is another example of a weak M&E system. Allegedly there are few defaulters but this is based on informal information and not systematic monitoring and reporting.

An important contribution has been the introduction of Paediatric Fixed Dose Combinations for children in need of ART allowing 89 children in Lindi and 113 in Mtwara to be put on treatment in 2008.

There are indications that more patients should be on second line treatment. In Ligula district hospital that has among the highest number of patients on ARV only 10 out of 726 ARV patients were on 2nd line regimen, at Ndanda hospital eight out of 805. Expert observations shared with the

review team confirm that a certain number of patients are not getting optimal treatment. There are also likely to be problems related to identification and management of side effects and complications but there seems to be no monitoring or reporting on this. Thus, the scale of the problem and how it is handled is not known. The low number of patients on 2nd line treatment and lacking knowledge of problems with side effects and complications is a strong indicator that there is need for improving the *quality* of the services by additional training of staff, preferably through on the job supervision and mentoring by experts.

7.2 Drug supplies

According to the reports and information given by staff during the review there is a good and reliable access to ARV medicine. An expatriate expert reported that it occurs that she does not have available the most efficacious medicine she knows about but it has become exceptional that facilities are not able to provide any ART to patients in need. CHAI has played its role in assisting the districts and facilities to unblock the supply chain so that ARV arrives in timely manner.

Another challenge is that some facilities are reporting a lack of medicine for opportunistic infections leading to illness and death (e.g. one hospital reported 10 deaths caused by Cryptococcus Meningitis). As for essential medicine for obstetric care CHAI is not monitoring the drug situation for opportunistic infections and is not procuring medicine to avoid stock outs. CHAI may not necessarily be the best placed to do this but should bring the issue up with partners to make sure there is a strategy and resources to deal with it.

Another important achievement is the improvement of the transport system for samples for CD4 count and DBS. In the year 2008 6801 CD4 samples were transported in Mtwara region and 843 DBS samples in Mtwara and Lindi.

7.3 Men’s role and family planning

When the review team asked staff both at PMTCT and CTC services what they saw as the major challenges in their work a frequent answer was that few men come for testing. All women received for consultation in ANC and VCT are asked to bring their partners but men count for only 10-20% of those tested. This definitely merits more attention for various reasons. Besides that testing men is necessary to enrol the HIV+ men into CTC programs it is crucial to reach men also in order to involve them in the treatment and protection of the pregnant women and their children. Staff interviewed reported that they know some cases where HIV+ women have negative partners but both were unaware of partner’s status. These men should be informed about their partners’ status to make protection possible

As PMTCT services the CTCs have little focus on family planning. Staff report that many HIV+ women become pregnant but the number is unknown and there is no data on how many of these have wanted to become pregnant or have become so by accident and lack of contraception. The CTC services in Mtwara do apparently offer some family planning counselling but this is not given much attention neither by the staff at the facilities who are not trained in this matter, nor by hospital management, nor by CHAI management. There is also no information about to what degree the HIV+ women enrolled in CTC who are getting pregnant are referred to PMTCT or how many of them are delivering in a health facility.

7.4 Conclusion and recommendations

There is a need to improve the monitoring of the staff in order to assess the capacity, performance, and training needs; monitoring of the equipment situation; and the monitoring of patients to know compliance rates, treatment complications and the need for second line treatment. To be able to estimate how to program is performing we suggest adding two indicators besides number of

patients enrolled and on ART:

- *Proportion of those ever started who are lost to follow up*, and
- *Proportion of patients alive with 95% drug adherence*.

Furthermore there is a need to look into the need for and the supplies of medicines for opportunistic infections.

The scaling up of PMTCT services has been faster than the scaling up of CTC and ART. The result will be that a substantial number of women tested in ANC at PMTCT centres will be informed that they are HIV+ but have no or very difficult access to CTC. Ideally one should not test anyone for HIV without the possibility of following up with CD4 count and referral to CTC. CHAI may have to reconsider the balance in the program in order to make ART more available to all the women tested in ANC.

8 HUMAN RESOURCES

The core objective of CHAI is to expand both PMTCT and CTC services in Lindi and Mtwara regions. Provision of these services requires sufficient and the right skilled manpower. Unfortunately Tanzania as many other developing countries is faced with a chronic shortage of Human Resources for Health (HRH). Given CHAI's involvement in service delivery, it was imperative for it to address the HRH issue. Historically CHAI was involved in the development of the first HIV/AIDS Care and Treatment plan of Tanzania within which the problem of HRH became very apparent, especially in relation to scaling up of CTC services.

CHAI's quest towards solving HRH problems in Tanzania also led to its involvement in the conceptualisation and initial implementation of the Mkapa Fellow Program (MKF), a program intended to serve the rural hard to reach areas with most deprived HRH. The program recruits three staffs (clinicians, nurse and pharmacists/ laboratorian) on contract agreements to these rural areas to serve for CTC services and additional services.

8.1 Recruitment

Problems related to deployment of health workers in districts have been a hindrance to filling in the HRH gaps. Health Sector Reforms has tried to address this by decentralising deployment processes at district level, however efforts to retain new staff has been minimal. One major factor is the failure to meet newly appointed staff salaries and other welfare for several months once hired. Realising this constrain, CHAI engaged itself to put in place an innovative mechanism to recruit new personnel by facilitating the regions to fast track hiring of key health staff and guarantees that the person will get his or hers salary the first three to six months. The staffs under this scheme include; one medical doctor, two clinical officers, one nurse, one pharmacist and one laboratory technician serving Sokoine Regional hospital and Nyangao Mission Hospital.

This initiative is well appreciated by the regions as evidenced through the discussions with the RHMT during the review. Some of the staff have been retained for an even lower salary compared to the start up salary that was facilitated by CHAI. The regional management has also ensured that they offer housing to these staff, which is also perceived to have influenced retention.
During this review, it was not evident that the Region was taking any additional measures to attract staff, the experience learnt from CHAI was had not been reciprocated through other means of funds at the region level, given that the region still faces a critical shortage of 63.4%. It was learnt that some other staff that had been allocated by the MOHSW were less retained, as they were not given the due attention as those hired through the CHAI scheme. It was also learnt that, some of the technical staff that have been hired through other programs were also facing challenges, mostly related to acceptance by fellow workers, particularly at the regional hospital.

<u>Other personnel: data clerks</u>
Erratic and delayed reporting from facilities to the RHMT has been identified as a continuous problem. It has been a challenge also for CHAI since the intention is to rely on routine reporting from facility level to monitor the program. To make sure the facilities report correctly and in time on PMTCT and CTC services CHAI as taken various steps:

> three data clerks were employed on a short term basis for 2 months to clean the backlog of CTC data in 3 hospitals in Mtwara and 5 hospitals in Lindi during the first half of 2008. Additionally, facility based data clerks were recruited and posted to 9 hospitals in Mtwara and Lindi. They have been trained in the CTC database and all hospitals are now reporting to NACP electronically on a monthly basis (Annual report 2008).

Moreover, CHAI recruited "volunteer" data clerks who are posted at regional level (in the regional hospitals but sit in the CHAI office) with the responsibility to compile data from the facilities, enter them into computers and forward them to national level.[14] When irregularities are found in the reports the data clerks visit facilities to clarify the figures and instruct the staff about correct registering and reporting.

It was reported that this has led to improved reporting in the sense that reports forwarded contain less apparent errors and they arrive more frequently in time. In fact, according to the annual report 2008 100% of the CTC sites and 90% of the PMTCT sites submitted reports on a monthly level to the regional and national level.

The review team found that these clerks have the potential to be more useful than they are today. As it is their tasks and responsibilities are very much limited to collecting, controlling and cleaning PMTCT data. However, despite the fact that they are located in the regional hospitals in strong need for the sort of competency, the review team learnt that regional hospital in Lindi had not utilised this capacity to its full potential, especially for other data related activities.

8.2 Capacity building and training

Target 2 under objective 1 is "Human resources capacity for provision of PMTCT services improved in Lindi". CHAI has been praised for its contribution in capacity building among health staff in Mtwara and Lindi. The types of training have ranged from clinical oriented ones to those in support of the general health system.

PMTCT training

According to the annual report for 2008 the main achievement has been to support PMTCT training of trainers (ToT) for 20 participants in Lindi. Following the ToT, cascade district training to 100 health care workers within 6 districts was realized. In addition the councils themselves have trained a certain number of staffs, e.g. 80 in Kilwa, 25 in Liwale. Such trainings were also carried out in some health facilities of Mtwara. In all the districts in Lindi, TOTs on PMTCT was carried out in collaboration with the MOHSW. The result is that there is definitely more staff in the region with basic knowledge of how to offer PMTCT services. However, due to huge staff turnover, some of the trained staff has not been retained to serve those health facilities. For example a visit to the Mandawa Health Centre in Lindi region, found that none of the existing staff were trained in PMTCT but they were offering these services. The in charge claimed to practice based on personal initiatives from the charts/guidelines and some of the information that she had picked up from different sources. This was also proved from several hand written charts related to diagnosis and treatment of HIV/AIDS patients.

Moreover, there are concerns about ToT as a method and some problems and challenges have been reported. One problem is that staffs who are supposed to do the cascade training of other staff meet certain obstacles trying to motivate their colleagues. One is that an insider with a limited level of competency and experience does not have the same authority as an external expert. Another obstacle is that staffs prefers to go to seminars and workshops themselves in order to receive allowances, which has become an important extra source of income for otherwise underpaid personnel. When they get on the job training they are not entitled to any allowance. In general ToT requires supportive supervision both of the ToT and the staff they are training to make sure the staff performance has a satisfying level.

[14] The use of the term *volunteer* is somewhat misleading since the data clerks as the CHAF receive stipends and should be considered as employed on short term assignments.

Early Infant Diagnosis (EID) is also important indicator of any PMTCT service. To enable the testing of infants or children who have been exposed to HIV, CHAI conducted training of 45 health workers from all the councils in Lindi as per the review report received from the RHMT in Lindi. The training of EID was mainly centred on; collection, storage and transportation of sampled dried blood spots (DBS) for testing by DNA-PCR currently available at the zonal and national hospitals. Additional training in relation to this was the joint training on infant feeding among community volunteers and health workers and also HIV/AIDS paediatric Psychological Counselling among 32 health care workers. Provider Initiated Testing and Counselling (PITC) has also been part and parcel of ensuring good PMTCT services. One of the biggest challenge as noted from the review is that fact that these training is not supported fully with the services such as the transport of the DBS and return of results. The poor follow up on infants feeding practices at home was also cited as a set back and somehow health workers felt that their hands were tied.

Community/Logistics management training

Right forecasting and commodity management has been cited as a major problem affecting adequate stocks in the health facilities. Former evaluation of this has shown that there are many problems some at the Medical Stores Department (MSD), Districts' level (District Medical Officer (DMO's) and the health facilities. CHAI has trained some staff at facility and district level on logistic management so as to be able to deal with some these problems. But in reality, the logistic system and commodity management in general is complicated. During the review, stock out of antibiotics and some drugs related to Emergency Obstetric care (EMOC) was common. Through our inquiries, the adaptation of the Integrated Logistic System (ILS) has somehow contributed to the shortage and further as justified by the MOHSW, that part of the problem was the failure of the DMOs to be proactive in terms of sending the orders /requests.

Nutritional training

Malnutrition is one major problem in the regions of Lindi and Mtwara, mainly affected by poverty. In order to address this problem, CHAI collaboratively with Tanzania Food and Nutrition Centre (TFNC) conducted training in relation to SAM was conducted in Lindi region among regional and district health mangers, 16 Community HIV/AIDS fellows and training of 25 health workers from 11 health facilities. Similarly, such training was also carried out in Mtwara with 33 health workers from 16 health facilities and 30 village health workers from 3 districts. This training was also complemented by the provision of Ready to Use Therapeutic Food (RUTF) and the sensitization of CHMTs and RHMTs in both regions.

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Training needs

In general it should be noted that there seems to be no *systematic* assessment of the performance or training needs of the staff working in the PMTCT and CTC services in terms of clinical or non clinical work. This contributes to a situation where there is little data or systematic knowledge concerning the *quality* of the services offered even though an objective is to provide "high quality" PMTCT services.

8.3 Supervision

One of the most important contributions of CHAI as declared by regional and district authorities is the support in supervision of both PMTCT and CTC in Lindi and Mtwara respectively. CHAI was also in this area further praised for supporting the existing system rather than inventing a parallel system like other partners. Some of the outcomes of this supervision as cited in the progress report

No 3 are; contribution to the revision of the PMTCT registers and summary forms used to monitor PMTCT and the posting of a community volunteer at region level to manage PMTCT data so as to hasten PMTCT data reporting. CHAI collaboration with the MOHSW and University of Dar es salaam in implementing the District Health Information Software (DHIS) also stemmed from the realisation that data was generally uncoordinated and that there existed many registers which made it difficult to compile.

However, despite these developments, it was learnt that supervision from both regions and district level does occur but not on routine manners. Despite the fact that this supervision has been cited as a means of monitoring and evaluating CHAI, this was not clearly demonstrated. There was also a mix up between outreach HIV/AIDS services and the general supervision. The health workers that were interviewed could not separate these, but were somehow more appreciative when the supervisors also gave them a hand in treating some of the patients. The modalities of carrying both type of activities was not very clear from the reviewers' side.

Although staffs recruited with the help of CHAI support are very much needed it appears that they could be of greater benefit to the region if they had a clearer responsibility in terms of supervision and training at a regional level. As it is supervision conducted by RHMT and CHAI seems to focus very much on routines for reporting and less on clinical performances. In Lingwa region promising results are reported from a project supported by Germany basically consisting of an ambulating expert in gynaecology who offers on the job training and supervision in facilities for a period of five days. She is focusing on the management of high risk pregnancies and this has allegedly led to a reduction in maternal mortalities. This indicates a need for more *technical* supervision and advice by experts. It should be noted that the review team did not go in depth about this issue.

8.3 Task shifting

In the midst of HRH crisis, task shifting has internationally been recognised as a key area of intervention. Task shifting becomes relevant in the interim of addressing the HRH shortage knowing that generation of the required HRH in Tanzania would take many more years. Moreover, it is justified with the fact that it is already practiced by necessity in the lower health facilities in Tanzania. The review team meat many staff doing work that according to rules and job descriptions should be the responsibility of superior staff, e.g. health attendants being in charge of women in labour and delivery.

The task shifting program under CHAI includes use of expert patients who are healthy People Living with HIV/AIDS (PLWHs). CHAI has recruited a number of patient experts who are working in health facilities both in Lindi and Mtwara region attached to PMTCT and CTC services respectively. Their role involves:

- Health education at health facilities CTC and PMTCT clinics
- Assist in weighing and registration of children
- Provide post result counselling
- Provide pre-test counselling to pregnant mothers
- Identify and track missing appointments
- Provide under five vaccinations, dispense Septrin and in some instances carry out DBS
- Participate in community sensitisation by giving testimonies
- Assisting with routine errands of the clinics

During the review, our encounter with some of the patient experts clearly indicated the dedication and motivation of these patients, most of them seemed happy to be involved. Their fellow workers

also appreciated their contribution, and cited them as an extra hand to the existing hard work in the clinics. In the discussions about this program a number of issues became apparent that could jeopardise or de-motivate the patient experts if they were not given due attention. These included;

- In Kilwa it was learnt that the expert patients had not been paid for the past two months, and this was because their payment was handled through the district council. The expert patients lamented during the interviews with review team, and expressed this as a de-motivating factor.
- Patient experts were grateful for such an opportunity, but complained that the allowance/payment was very low and could mostly meet their transport to the clinics, particularly those residing in the urban areas. They pleaded for an increase in allowance at least by an extra Tshs 20,000.
- Despite the fact that the role of the expert patients has been well defined by CHAI, it seems in practice this varies considerably, for instance two of the patient experts in Ligula Hospital declared to be left to man the clinic of their own, because the other staffs were busy with outreach services. They particularly felt uncomfortable filling in forms that they were never trained on.
- Almost all the encounters with the patient experts expressed unhappiness with the fact that they were part and parcel of the clinic work but were rarely involved in trainings opportunities at the clinic and as a result they were the ones who were left to the extra work when the others went away.

The patient expert program is quite unique and useful but CHAI needs to ensure that it is well documented as a program with clear indicators and means of monitoring and evaluating the program. The review team could not get any substantial information that indicated a very clear supervision mechanism leave alone a write up related to the sub program.

8.6 CHAF

The Community HIV/AIDS Fellows (CHAF) are so called “volunteers” recruited to work for one year at a facility. They have been recruited among students graduating in social sciences and technical studies and from Social Development studies. Most of them are originally from other parts of Tanzania than Lindi and Mtwara. Basically their primary responsibility is to make a link between the health facilities and the communities through various outreach activities such as sensitisation and follow up of patients. They all go through a five week training program preparing them for the work. They receive a stipend during the year they work in the facility.

One of the ascribed tasks for CHAFs is to do follow up of defaulters and convince them to come back for treatment. It is reported that some have been able to track down defaulters in PMTCT or ART programs and motivate them to pick up treatment but accurate information about how successful they are in general is not available. However, the MTR team found that some CHAFs tend to prefer to focus on work in the clinic rather than working in the communities. They are very much appreciated by the staff as they can help with various non-clinical tasks such as registering, reporting and counselling. Some of them are also doing HIV tests. The training program does not prepare them for the clinic work and they have to be instructed and trained by the staff in the facility. This may result in little systematic training and lead to sub-standard service quality.

In two dispensaries only four-five women were enrolled for PMTCT but they failed to come for prophylaxis and the CHAFs had either not taken any action or failed to make them come back. With so small numbers it should be manageable to ensure good follow-up. The CHAFs report they have problems in their reach out activities because of long distances and lack of transport. They also

meet with challenges in the communities and are discouraged by people asking for money and other rewards. In some places they then team up with other CHAFs to handle the challenge together. In other places we found that this leads them to prefer the work in the clinic. To be successful in outreach activities depend largely on personal faculties in communication. When the selection of personnel is not using communication skills as criteria such as in this case then normally some of them will not be very competent or comfortable with this.

Some CHAF seem to have qualifications that could be useful at other places and levels than lower level health facilities. The review team met a CHAF working in a quite remote dispensary who has a diploma in procurement. The staff appreciated very much his contribution in reporting and planning orders but with the present lack of people with such education and training at more central level it seems like he should rather have been working with CHMT.

Some CHAFs have left before accomplishing their term. In two dispensaries visited they had resigned and left for other work after three to four months. This is probably due to a combination of push and pull factors. As people with university degrees they can often find work elsewhere if they want to. Most of them are staying in rather remote areas that are not attractive to persons with a higher education. One push factor that was mentioned is lack of housing and low housing standards. Some have to live at least for periods in rented mud houses.

The councils are supposed to be responsible for supervision, support and follow-up of the CHAFs but this seems to be very limited. Supportive supervision is important to motivate all sorts of personnel but staff who has only five weeks of training before entering a challenging field should get rather extensive support and mentoring to control the quality of their work, motivate them and help them improve. Monitoring of the performance should also be regular and systematic. As it is the evidence is very scarce in terms of knowing if the investments in the CHAF is cost effective and gives good value for the money.

A complement (or an alternative) to the CHAF program would be to invest more in the Home Based Care people who are volunteers chosen by village leaders. This group of people is allegedly not very motivated and is struggling with small resources including lack of transport. The catholic hospital in Ndanda district in Mtwara has in collaboration with the Parish set up a team supporting the HBCs and providing them with supportive supervision combined with some incentives such as bags and bicycles. It is reported to have been very successful in motivating people to test for HIV, seek health services and in reducing HIV related stigma. The management of the project says it is costly but is also very extensive and reaching a high number of communities compared to the CHAF program which covers only a few villages in each district.

As a measure to compensate for the number of health staff and for weak community programs the CHAF component has a limited impact simply because they are quite limited in number. For example there are four CHAFs for 38 facilities in Mtwara rural district. The recommendation is to look more closely at how the CHAFs are performing and to what degree they are given a good value for the money. There are indications that the money may be better used in contributing to strengthen the HBC programs.

8.7 Conclusion and recommendations

The CHAI program has contributed with a substantial increase of staff trained in the provision of PMTCT and care and treatment. This is a commendable effort in a situation with a critical lack of skilled personnel. With the ambition of providing *high quality services* regular and systematic

assessments of staff performance and training needs and regular supportive supervision is essential. Further efforts and a strengthening of the program in this sense are required. Guaranteeing the start up salary for key staff who has been recruited is an innovative measure but there is a need to look at how the persons recruited through this mechanism can be used more systematically in supervision and training. Staff providing PMTCT, obstetric care and treatment and care for HIV/AIDS patients are facing many difficult and complex cases. There is need for providing more on the job monitoring and training by experts and CHAI should look into possibilities for offering more of this sort of assistance to facilities.

Further recommendations are to review job descriptions for the data clerks at regional level; strengthen the monitoring and supervision of expert patients and Strengthen monitoring and supervision of CHAF

9 MONITORING AND EVALUATION

9.1 Existing M&E framework

One of the core components of any program is a clear monitoring and evaluation plan, which gives the opportunity to learn from the barriers/obstacles as implementation fairs. As has been repeatedly noted in the previous chapters the review team has found a lack of reliable data in a number of areas. Some of the information missing is crucial to document progress and impact of the program and to enable correction of the design and methods and for adjusting the approaches.

Some of the main issues are

- Lack of baseline data
- Strong focus on quantifiable factors easy to measure, little on quality aspects, e.g. staffs' performance in counselling, follow-up of defaulters and breastfeeding women etc.
- Lack of data on compliance with treatment both for PMTCT and ART patients.
- Not systematically learning from failures, nor from good practices
- Problems and gaps are not discovered or not reported, e.g. CHAFs' problems in outreach activities, stock outs of drugs for opportunistic infections, lack of material.

Unfortunately, there was no one particular M&E plan to oversee the implementation all of the CHAI sub programs. Currently, in practice, there is separate reporting for the individual projects undertaken under CHAI e.g. task shifting (patient experts), PMTCT, CTC, CHAFs etc.

Some of these sub programs had different implementation and reporting plans. This was noticed when the review of two separate reports was done, namely task shifting and CHAFs. How this information is shared and reported is also questionable because during our review we noticed exchanges of reports among CHAI officers from the district to the regional offices in paper forms, some typed and others hand written. When the team requested for any reports, it was not easily availed, and officers requested to prepare them before they could be handed over to the review team. There was neither a comprehensive M&E plan nor a report from both Lindi and Mtwara CHAI offices.

A set of comprehensive indicators in relation to monitoring and evaluation of PMTCT was available at the CHAI headquarters. These indicators originate from the Global PMTCT office of CHAI in USA. These indicators included aspects of; HIV transmission, ANC care, post partum care and exposed infant care. There are a number of indicators, which in reality at health facility level are collected through different registers and differing reporting systems (PMTCT and ANC registers).

Regardless of very clear framework for M&E under CHAI, this was not the impression the review team got during the review. In almost all the health facilities that were visited, there existed no single report summarising all these key indicators in relation to PMTCT. Further, health workers in the specific clinics did not really have first hand information on PMTCT cascades. For example in Lindi, based on the estimated prevalence, the estimates for the PMTCT cascade have been calculated and a presented in the Box below.

Box XXX Indicators and number for PMTCT cascade in Lindi

Based on an estimated 2,750 HIV-infected women giving birth in Lindi region per year (29, 258 estimated births in Lindi region/year; ANC HIV prevalence of 9.4%). CHAI Tanzania has set targets for ANC uptake of 50% in Year 0-0.5 (688 HIV-exposed births), 60% in Year 0.5-1.5 (1,650 HIV-exposed births), 75% in Year 1.5-2.5 (2,063 HIV-exposed births) and 80% in Year 2.5-3 (1,100 HIV-exposed births). Of the HIV-infected women who attend ANC, CHAI Tanzania is targeting 0% to receive the full cascade in Year 0-0.5, 25% in Year 0.5-1.5 (413), 60% in Year 1.5-2.5 (1,238) and 80% in Year 2.5-3 (880). 2,531 mother-infant pairs. (Source: CHAI PMTCT M/E log framework , 2008)

An observed practice was to have sufficient information on numbers of women who had tested but poorly informed on the other core components of PMTCT cascade (such as compliance to CTC, prophylaxis, partner testing etc). Even though this information is available, it has not been collated at the point of the health facility, and almost all the health workers that were interviewed struggled to comprehend this information. From the reviewer’s point of view, the mere fact that the health workers do not really know or see the association of these data, is an indication of also limited comprehension of the whole PMTCT program.

The review team learned that CHAI was in the process of employing a new staff member who is a M&E expert and who will have the responsibility of addressing many of the issues raised above.ø

9.2 Health information systems

Target one under objective number five was: All 12 CHMTs of Mtwara and Lindi collecting comprehensive HIV/AIDS related information, utilizing it for planning and reporting to the region on monthly basis by December 2009.

As noted in the chapter on human resource the recruitment and deployment of data clerks at regional level has led to improved reporting routines and reports from facilities are delivered mostly on time and with less errors than before. However, this effort is limited to the compiling and management of PMTCT program information. In order to integrate health information within districts and improving the general health information system CHAI has initiated a collaboration with the HMIS Unit of the MoHSW and University of Dar es Salaam to pilot the District Health Information System (DHIS) in the Kilwa and Newala districts. The DHIS integrates HIV information and other health information and is based on the health management information system (HMIS) currently existing in the districts. A person with a Master degree in health information was employed this year and started working in the CHAI office in Mtwara to support this work.

9.3 Conclusion and recommendation

With the recruitment of a new M&E expert at the head quarter together with a health information system officer in the Mtwara regional office there is reason to believe that CHAI will be able to address and correct many of the weaknesses pointed to above. We emphasize that there is a rather critical need to strengthen the M&E system with a particular focus on monitoring the performance

and training needs of staff, effect of new interventions and quality of services. Monitoring and reporting on essential indicators such as compliance with PMTCT and ARV treatment and HIV status of infants should be strengthened.

11 CONCLUSION AND RECOMMENDATIONS

The CHAI program has made considerable and commendable achievements in a short span of time. Among the most important is the scaling up of CTC and PMTCT services allowing many more people to have access to life saving care, treatment and medicine. Integral to this effort there is a range of important interventions such as training of staff, improving transport of CD4 samples, and installing solar power just to mention a few outstanding examples. The CHAI program and the way it is set up is praised and appreciated by most if not all partners in the two regions.

Nevertheless, the review team identified a number of weak points and major challenges that may constitute a serious threat to the success and sustainability of the program if not properly addressed. Among the most urgent issues is the need to strengthen routine monitoring, to improve follow-up of pregnant HIV+ women and HIV exposed newborn children, and strengthen training and supervision related to second line treatment and management of ART complications.

As discussed in chapter 3 the programs has not had a defined overall development goal. It can be *assumed* that the goal has been to reduce mother to child transmission of HIV and to reduce morbidity and mortality caused by HIV. Particularly for the PMTCT services it seems like the lack of a goal has translated in to a program design where important elements in comprehensive PMTCT services have been neglected, notably prevention of pregnancies, follow up of mothers after delivery and their newborn children and in general quality aspects of services.

Another critical issue is the monitoring set up. **There is no data concerning the percentage or number of HIV infected women identified in ANC who have received complete course of ARV prophylaxis in ANC and maternity. Likewise, data is not available about the proportion of patients who have started on ART who are lost to follow up or proportion of patients alive and with a high drug adherence.** When these figures are not known (or not presented) the success of the program in terms of preventing mother to child transmission or in reducing mortality among PLWH cannot be properly assessed. The figures that do exist indicate only a modest success in PMTCT indicating a strong need to refocus on improving the quality of the services and the performance of the staff rather than continuing the rapid expansion.

CHAI is to a large degree trying to implement the CTC and PMTCT program by using the existing national system for management, monitoring and provision of health services. The challenge for CHAI, however, is that in intending to use the current system in order to scale up services and improve the quality they are faced with a range of systemic impediments and bottlenecks. Organisations using a more vertical approach can bypass at least some of these problems by setting up their own structures outside the government system making them less dependent of the capacity and performance of elements outside the program they are in charge of. Particularly the PMTCT services are interacting with many aspects of the health system and success depends on many factors such as number and qualification of staff including hospital/facility management, drug supplies, standard of facilities, water and electricity supplies, outreach programs, local transport possibilities, etc. As one informant put it, PMTCT is now medically easy (less than 2% of children born by HIV+ women get HIV in developing countries) but is programmatically very complicated.

The way CHAI operates makes success depend on a functioning health system. It may be tempting to try to correct the many weaknesses that are impeding progress. The systemic weaknesses and obstacles are very difficult to change for external actors such as NGOs. Strengthening management and health systems depends highly on good policies and strategic and strong leadership from the Government and central authorities. In the case of CHAI this may lead the organisation to spend an disproportionable amount of resources on "fire fighting", e.g. procuring drugs and equipment when hospital management, councils and MSD fail to deliver. However, we agree that setting up parallel vertical structures is not a viable alternative. The willingness to work through and with the Government system is commendable and an example to be followed. Still there is a need to concentrate and focus on the areas that are most crucial for the success of the program.

Recommendations

Program design

- Revise the objectives and targets to improve the correspondence between objectives and targets and to make them more consistent.
- Set up a proper goal hierarchy including an overall development goal and relevant indicators (preferably guided by a conceptual framework).
- Focus more on increasing the quality of services as compared to expansion in terms of numbers of staff and facilities providing PMTCT and care and treatment.

PMTCT

- Address more systematically the challenge of attracting HIV+ women to facilities for delivery including systematic assessments of barriers to uptake of services and monitoring the effect of innovative interventions such as incentive packets.
- Improve counselling about and follow-up of breastfeeding.
- Offer training in family planning counselling and support provision of contraception.
- Strengthen program elements for the testing of children through a closer follow up of mothers and newborns and assessments of staffs' performance and training needs.
- Strengthen outreach and community work and seek new ways to improve links between facilities and HBCs and TBAs.

CTC

- Improve monitoring, supervision and training related to side effects of ART, treatment complications, opportunistic infections and second line treatment.
- Offer training in family planning counselling and support provision of contraception.

Human resources

- Assess regularly and systematically training needs and impact of training
- Reconsider qualifications needed for CHAI staff at regional level
- Review job descriptions for and use of data clerks at regional level
- Strengthen monitoring and supervision of expert patients
- Provide expert technical assistance for PMTCT and ART
- Strengthen monitoring and supervision of CHAF

Monitoring and health information systems

- Strengthen the M&E system with a particular focus on monitoring the performance and training needs of staff, effect of new interventions and quality of services.
- Improve monitoring and reporting on essential indicators such as compliance with PMTCT and ARV treatment and HIV status of infants.

- Introduce regular assessments of staff situation, performance and training needs.
- Monitor and supervise more closely and regularly the CHAF

Efforts to address the needs for health systems strengthening should not move beyond what is currently included: improving infrastructure, training and supervision of staff, monitoring and DHIS. The challenges within the provision of comprehensive quality PMTCT and CTC services are so considerable that the priority in at least the near future should be to strengthen existing program elements rather than expansion into new areas.

The need to focus on strengthening the existing program is also valid concerning the possibility to take on more MNCH focus. However, the success of a PMTCT program is largely depending on the quality of maternal and newborn health services. Efforts to improve delivery services and outreach in order to attract pregnant HIV+ to facilities for delivery and post natal follow-up will necessarily also benefit HIV negative women and their children. Moreover, if well monitored lessons learned from the PMTCT program will be of use for the improvement of MNCH services in general.

ANNEX 1: Terms of Reference

Terms of Reference for a Mid-term Review of the cooperation between the Norwegian Ministry of Foreign Affairs and the William J. Clinton Foundation regarding the Scaling- Up PMTCT Services in Tanzania

Introduction
Since July 2005, Clinton Foundation HIV/AIDS Initiative (CHAI), a program of the William J. Clinton Foundation (Clinton Foundation) has been collaborating with the Tanzanian Ministry of Health and Social Welfare (MoHSW), the Regional and Council Health Management Teams (RHMTs and CHMTs) in Mtwara and Lindi regions of Tanzania to expand rural access to HIV/AIDS Care and Treatment services. From July 2007, with financial support from the Government of the Kingdom of Norway through the Norwegian Ministry of Foreign Affairs the scope of the program was expanded to include the scaling up prevention of mother to child transmission of HIV (PMTCT) services in Lindi Region.

The main goal of the program is to provide universal access to high quality PMTCT services to pregnant women in the Lindi region and expand access to HIV/AIDS care and treatment services to eligible HIV+ children and adults in Lindi and Mtwara regions by December 2010. From July 2007 through December of 2007 the primary focus was expanding access to quality HIV/AIDS care and treatment services and preparations implementation of interventions to scaling PMTCT services. The focus on PMTCT scale up in Lindi began in January 2008 with full implementation underway in July of 2008. Major program activities include facility renovation, human resource capacity building through recruitment and training, task-shifting, provision of HIV drugs and commodities, support for supply chain management, early infant diagnosis (EID), laboratory strengthening including sample transportation systems, and community based activities to improve coordination between health facilities community home based care.

According to the agreement between the Norwegian Ministry of Foreign Affairs (MFA) and the Clinton Foundation, a midterm review of the program focusing on progress to date and the effectiveness of the program (i.e. the extent to which the Purpose is being achieved) shall be carried in the second quarter of 2009. An assessment of the programs impact may also be included in the review. In addition, the MFA reserves the right to carry out an independent review or evaluation of the program (covered by funds over and above the grant) as and when the MFA deems necessary. During the second annual meeting between the Royal Norwegian Embassy (RNE) and CHAI agreed to conduct and complete the mid term review between August - October of 2009. The mid-term review will focus on progress to date, according to set targets at program activity and output levels.. This will enable the program to better understand implementation process successes and challenges, "lessons learned" and areas for focus in the second half of the grant period. The mid term review will also include a value for money audit of selected interventions.

The mid-term review is an opportunity to have an external assessment of the program's implementation process so far. Understanding both successes and challenges in program activities and outputs thus far will increase the program's ability to achieve the goal of reducing HIV transmission to newborns and enrolling HIV positive women, children and their partners in care and treatment services through the PMTCT+ program in Lindi region and improving the quality and quantity of HIV/AIDS care and treatment services in Lindi and Mtwara regions to date since implementation began in July 2007.

Furthermore, CHAI and the Royal Norwegian Embassy have started discussions on the possibility of broadening the cooperation in Lindi and Mtwara to include a sharper focus on activities related to reduction of maternal and child mortality. The partners would therefore like to take the opportunity of the mid-term review to do an assessment of the potential for, and appropriateness of, CHAI becoming a more active partner that can contribute to improving management, budgeting and planning for scaled up quality MNCH services, support the improvement of critical health infrastructure, support procurement and supplies management for MNCH commodities and help address health worker shortages in the area of maternal and child health in key districts of Lindi and Mtwara, as well as become involved in a wider scope of activities related to improving maternal and child health, i.e. in scaling up quality and quantity of lifesaving interventions before, during and after delivery.

The in-country review is expected to commence in August 2009 and be completed by end of September 2009.

Objectives
The objectives of the mid-term review are as follows:

- Assess the progress in implementation of program activities as identified in the program design/proposal and modified during implementation as reflected in the work plans.

- Assess the appropriateness, relative efficiency and effectiveness in terms of implementing program activities, including an assessment of the planning and programming.
- Assess the outcomes of the program to date on the quantity and quality of key aspects of PMTCT services in Lindi and HIV/AIDS care and treatment services in Lindi and Mtwara.
- Determine whether the program is on track to achieving its overall goals of contributing to reducing mother to child transmission of HIV and increasing access, quality and utilization of HIV/AIDS care and treatment services.
- Identify lessons learnt that can benefit the program implementation.
- Assess the potential and appropriateness of CHAI becoming a more active partner in addressing health system aspects like worker shortages, management, planning and budgeting, procurement and supply management for comprehensive MNCH service delivery in the area of maternal and child health in all districts of Lindi and Mtwara
- Assess the potential and appropriateness of CHAI becoming involved in a wider scope of activities related to improving maternal and neonatal health

Scope
Below is a summary of the general scope of the review, followed by a list of the deliverables in a roughly chronological order:

The scope of the review should include:

- The extent to which the specific objectives, benefits and impacts are being addressed through specific program activities and outputs. The objectives of the program are as follows:
    - To expand the number of health facilities providing PMTCT services in Lindi region to 120 by December 2010
    - To increase uptake of PMTCT services in Mtwara and Lindi by December 2010
    - To provide high quality PMTCT services to 85% of pregnant women in Lindi by December 2010
    - To expand access to HIV/AIDS Care and Treatment services in rural areas and provide ART to 60% of all eligible PLHAs in Mtwara and 52% of all eligible PLHAs in Lindi by December 2010
    - To strengthen health systems in Lindi and Mtwara and integrate activities for scaling up access to comprehensive HIV/AIDS services within district plans by December 2010
- The views and experience of groups who have benefited from, been involved in, or been affected by the activity wherever possible
- Identify any shortcomings or challenges during the program implementation
- Assess key contextual factors influencing program implementation, including local infrastructure and capacity
- Review and propose necessary actions to ensure long-term sustainability of the program
- Propose options for the evolution of the program and how this might be achieved through appropriate re-orientation (to take on more MNCH focus). Consider new possible linkages and partnerships particularly with governmental and non-governmental actors working on MNCH.
- Identify and consolidate lessons learnt (operational and developmental)
- Assess the financial management of the program, including an assessment of the "value for money" aspect and the unit costs for the main activities.

Deliverables- 1. Study Plan:

- Develop an appropriate plan for the program mid-term review. A major task will be identifying a methodological approach which allows the team to address the program review objectives in a thorough manner that is feasible given the expected timeline and study budget. The methodological approach must be presented in detail, including a description of how program inputs, implementation, and outputs are to be assessed and related to each other.
- In order to accomplish this responsibility, the CHAI Tanzania team will provide background materials (including the program proposal, existing reports and program monitoring data) in advance, and further outline expectations as well as what they hope to gain from the mid-term review. CHAI Tanzania team members will discuss the non-financial resources available for the review and other logistical concerns and constraints that have implications for the study design.
- Prior to the implementation of the review, it is expected that the study plan will be presented to the CHAI Tanzania team and representatives of the Kingdom of Norway. The component of the review that is focused on the PMTCT program in Lindi will be made available for review to the CHAI Global M&E and PMTCT teams to ensure consistency with the Global PMTCT program. The chosen approach/method must clarify both advantages and limitations, for instance by comparing and contrasting it to other potential approaches. Comparison of what level of findings available to the selected methodology versus

others should be made where possible and relevant. This will enable the team to provide appropriate feedback and approval of the study plan.

Deliverables- 2.Conduct of Review:

- It is expected that fieldwork for the review will begin upon approval of the study plan by the CHAI Tanzania Country Director and notification of the independently select sites to conduct evaluation activities.

Deliverables-3. Reports (see reporting requirements below):

- After completion of fieldwork and prior to departure, there will be a debriefing with the CHAI Tanzania country team and the Norwegian Embassy on preliminary findings. An initial write up is expected to accompany the debriefing. This write up should be shared electronically with the Global PMTCT and M&E teams.
- A draft report is to be disseminated to the CHAI Tanzania team and the Global PMTCT and M&E teams and forwarded to the Norwegian Embassy for feedback on the utility of the presentation, format and analysis (please provide a time limit for such comments, e.g. within one working week).
- The full written report is to be disseminated to the CHAI Tanzania team, Global PMTCT and M&E teams as well as the Kingdom of Norway within 4 weeks of completion of fieldwork.

Duration and Phasing

Mid-term review activities will take place from August – end of September 2009. During this time the following phases of the review are expected to be completed:

- Provision of background briefing materials
- Development, presentation and approval of review design
- Fieldwork
- In-country debriefing
- Initial write-up
- Draft report preparation
- Feedback on the report and
- Finalizing the documents required.

Reporting Requirements

All reports are expected to reflect the need for clarity, brevity and utility for program management and should be provided to the CHAI Country Director (<yipuge@clintonfoundaton.org>) representing the Clinton Foundation and the First Secretary, Royal Norwegian Embassy (Hanne.Therese.Tilrem@mfa.no). Copies of the reports will also be provided to the Ministry of Foreign Affairs of the Government of Kingdom of Norway, NORAD and the CHAI Global PMTCT and M&E teams. The reports are expected to be submitted electronically to the e-mail addresses provided and/or additional e-mail addresses to be provided with the briefing materials. The preferred format is a 2003 MS Word document for ease of feedback. The final report may be submitted as a PDF. A formal timetable for report due dates will be developed upon finalization of fieldwork dates. The reports and their general timetables are listed below:

- Provision of initial write up after the filed work and prior to departure from Tanzania of the international consultant
- Provision of a draft report 4 weeks following fieldwork for feedback
- Provision of full written report by 6 weeks following fieldwork

Proposed Composition of the Review Team

In order to have a suitable balance in the team between local and international consultants, the review team will comprise of a national consultant recruited (and paid for) by CHAI and an international consultant recruited (and paid for) by MFA. In addition, RNE will recruit and pay for an auditor to join the team for the value for money audit.

CHAI and RNE will select between the national and the international consultant a team leader for the review. The team leader shall be responsible for the final report of the review.

Proposed Qualifications for the Consultancy Team

- Documented experience in leading program monitoring and evaluation studies
- Knowledge of and experience with the application of evaluation principles and standards in the context of resource limited settings

- Experience evaluating PTMCT programs, reproductive and child health services and/or HIV/AIDS programs is strongly preferred
- Knowledge of HIV/AIDS care and treatment in resource-limited settings required
- Knowledge of Tanzania's health system and of the HIV/AIDS context in the country
- Technical knowledge of neonatal, maternal and child health care
- Relevant higher degrees (M.Med, Ph.D or equivalent for at least one team member).
- Relevant academic backgrounds (public health, medicine, economics/biostatistics, financial audit).
- Experience and knowledge of financial management, works procurement and contract management
- Demonstrated ability to work within set deadlines, and to write concise reports.
- A working knowledge of Norwegian development assistance
- Languages: English and Kiswahili

ANNEX 2: Objectives and targets for the CHAI program as of 2009

Objective 1: To expand number of health facilities providing PMTCT services in Lindi region to 120 by December 2010

Target 1: Infrastructure in 21 health facilities in Lindi Region assessed and/or improved by December 2009

Target 2: Human resources capacity for provision of PMTCT services improved in Lindi

Target 3: Organization of PMTCT services at health facility improved by December 2009

Objective 2: To increase uptake of PMTCT services in Mtwara and Lindi by December 2010

Target 1: All HIV positive pregnant women attending ANC services are identified and enrolled into PMTCT services by December 2009

Target 2: Facility deliveries in Lindi region increased from 56% to 60% by December 2009

Target 3: Provide community based PMTCT to women who cannot reach health facilities in Lindi region and Mtwara rural district by December 2009

Objective 3: To provide high quality PMTCT services to 85% pregnant women in Lindi and Mtwara by December 2010

Target 1: 70% of HIV positive women attending ANC, during and after delivery receive efficacious ARV regimen for prophylaxis or treatment by December 2009

Target 2: 85% of HIV exposed infants are identified, tested by December 2009

Target 3: HIV+ women and children who are lost to follow from PMTCT services are identified and re-enrolled into the program by December 2009

Objective 4: To expand access to HIV/AIDS Care and Treatment services in rural areas and increase the number of PLHAs on ART from 5,400 to 8,400 in Mtwara and from 3,000 to 5,500 in Lindi by December 2010

Target 1: Health facilities providing care and treatment services in Mtwara expanded from 37 to 55 and in Lindi from 33 to 45 by December 2009

Target 2: Access to care and treatment services in Mtwara expanded to provide ART to 1,500 new PLHAs and 75% of them retained by December 2009

Target 3: Access to care and treatment services to provide ART in Lindi to 1,000 new PLHAs and 75% of them retained by December 2009

Target 4: Access to pediatric care and treatment services expanded to reach 200 new children on ART in Mtwara and 150 new children in Lindi by December 2009

Target 5: Community based HIV prevention, Care and Treatment services from facility to community expanded from 63 to 101 villages of 6 district councils of Mtwara and established in 75

villages of 6 district councils of Lindi by December 2009

Objective 5: To strengthen health systems in Lindi and Mtwara and integrate activities for scaling up access to comprehensive HIV/AIDS services within district plans by December 2010

Target 1: All 12 CHMTs of Mtwara and Lindi collecting comprehensive HIV/AIDS related information, utilizing it for planning and reporting to the region on monthly basis by December 2009

Target 2: HIV/AIDS services effectively planned, managed and integrated in CCHPs of all districts of Mtwara and Lindi regions by December 2009

Target 3: HIV/ADS related commodity management improved in all 12 District Councils of Mtwara and Lindi regions by December 2009

Target 4: National roll-out of rural access to treatment supported by December 2009

Target 5: Program management and technical support provided by CHAI to RHMT and CHMT in Lindi and Mtwara

ANNEX 3: Financial Management and Value for Money Assessment

1. EXECUTIVE SUMMARY

1.1. CHAI's contribution in financial terms is not reflected in the Audited Financial statements of the programme. We advise that this should get reflected in the audited financial statements.

1.2. There is little control over expenses by the district once the funds are transferred. We recommend that CHAI should increase monitoring of these funds to ensure that they are utilised as per plans.

1.3. Codes designed in the accounting system are having primary objective to identify expenses by expense heads, but this coding system fails to track the expenses to the activities.

1.4. CHAI has strengthened their capacity in order to ensure better monitoring, but we still feel that more needs to be done to ensure that funds provided to district are used as per plan and there are no delays in carrying out the planned activities.

1.5. We have observed that amounts send to the district are accounted in the books of CHAI and the programme as amount spent for the activity, but as on the reporting date, there is a possibility that the amount has not been spend and the activity has not been carried out.

1.6. During our review of documents, we observed that certain payments to the suppliers were made on the basis of proforma invoice and no commercial tax invoice was obtained.

1.7. During our review we observed that certain expense entries are passed on the basis of instruction from the HO of Clinton Foundation. No documentation is available for such expenses recorded in the books of the project.

1.8. During the review, we observed that there was certain non compliance with the statutory payments.

1.9. CHAI has done their best with respect to the management of funds and activities, but certain inherent risks do raise a concern over the realisation of value for money in longer terms.

All these infrastructural developments would be really worth only if maintained properly and used for its optimum useful life.

In general, considering the quality of management of CHAI and their committement to the project, Norwegian funds are in safe hand and are being used diligently, but due to certain inherent limitations there arises an obvious question regarding the sustainability of these investments over its useful life.

2. INTRODUCTION

2.1. About CHAI

Since July 2005, Clinton Foundation HIV/AIDS Initiative (CHAI), a program of the William J. Clinton Foundation (Clinton Foundation) has been collaborating with the Tanzanian Ministry of Health and Social Welfare (MoHSW), the Regional and Council Health Management Teams (RHMTs and CHMTs) in Mtwara and Lindi regions of Tanzania to expand rural access to HIV/AIDS Care and Treatment services.

In July 2007, the Clinton Foundation HIV/AIDS Initiative (CHAI), in collaboration with the Ministry of Health and Social Welfare (MoHSW), the Regional Health Management Teams (RHMTs) and Council Health Management Teams (CHMTs) in Mtwara and Lindi and with financial support from the Kingdom of Norway, began implementation of the program to scale up PMTCT services and Care and Treatment services in these two regions. This program was born from a Memorandum of understanding between the Government of Norway and the Clinton Foundation for Co-operation in the fight against HIV and AIDS in several countries in Africa and Asia. In November 2007, the Royal Norwegian Embassy in Tanzania and the CHAI-Tanzania country office signed an agreement setting forth the terms and procedures for Norway to support the scaling up of PMTCT services in Lindi and HIV/AIDS Care and treatment services in Lindi and Mtwara regions. This program expands upon the Norway-Tanzania Partnership Initiative on maternal health and the newborn and CHAI Global strategy on universal access to PMTCT services.

The main goal of the program is to provide universal access to high quality PMTCT services to pregnant women in Lindi Region and expand access to HIV/AIDS care and treatment services to eligible HIV+ children and adults in Lindi and Mtwara region by December 2010.

Over the three years of implementation the program seeks to address and improve the following key areas in the Lindi and Mtwara regions:

- **Human Resources:** by recruiting and training health care workers and community health workers
- **Quality of care** (delivery care and PMTCT): by training health staff and providing supportive supervision
- **Infrastructure**: by renovating health facilities
- **Outreach** (and deliveries in health facilities) by mobilizing Community Health Workers (CHWs) and piloting mobile clinics
- **Testing:** through the provision of “emergency testing” for pregnant women delivering in the community
- **Community and family support:** by involving community and religious leaders, providing services (PMTCT+) and incentives to partners, and through community sensitization

2.2. Objective and scope of review

According to the Terms of Reference (see annex no X) the objectives of the mid-term review were as follows:

- Assess the progress in implementation of program activities as identified in the program design/proposal and modified during implementation as reflected in the work plans.
- Assess the appropriateness, relative efficiency and effectiveness in terms of implementing program activities, including an assessment of the planning and programming.
- Assess the outcomes of the program to date on the quantity and quality of key aspects of PMTCT services in Lindi and HIV/AIDS care and treatment services in Lindi and Mtwara.
- Determine whether the program is on track to achieving its overall goals of contributing to reducing mother to child transmission of HIV and increasing access, quality and utilization of HIV/AIDS care and treatment services.
- Identify lessons learnt that can benefit the program implementation.
- Assess the potential and appropriateness of CHAI becoming a more active partner in addressing health system aspects like worker shortages, management, planning and budgeting, procurement and supply management for comprehensive MNCH service delivery in the area of maternal and child health in all districts of Lindi and Mtwara
- Assess the potential and appropriateness of CHAI becoming involved in a wider scope of activities related to improving maternal and neonatal health

The scope of the review includes:

- The extent to which the specific objectives, benefits and impacts are being addressed through specific program activities and outputs. The objectives of the program are as follows:
  - To expand the number of health facilities providing PMTCT services in Lindi region to 120 by December 2010
  - To increase uptake of PMTCT services in Mtwara and Lindi by December 2010
  - To provide high quality PMTCT services to 85% of pregnant women in Lindi by December 2010
  - To expand access to HIV/AIDS Care and Treatment services in rural areas and provide ART to 60% of all eligible PLHAs in Mtwara and 52% of all eligible PLHAs in Lindi by December 2010
  - To strengthen health systems in Lindi and Mtwara and integrate activities for scaling up access to comprehensive HIV/AIDS services within district plans by December 2010
- The views and experience of groups who have benefited from, been involved in, or been affected by the activity wherever possible
- Identify any shortcomings or challenges during the program implementation
- Assess key contextual factors influencing program implementation, including local infrastructure and capacity

- Review and propose necessary actions to ensure long-term sustainability of the program
- Propose options for the evolution of the program and how this might be achieved through appropriate re-orientation (to take on more MNCH focus). Consider new possible linkages and partnerships particularly with governmental and non-governmental actors working on MNCH.
- Identify and consolidate lessons learnt (operational and developmental)
- Assess the financial management of the program, including an assessment of the "value for money" aspect and the unit costs for the main activities.

2.3. Methodology

Baker Tilly DGP & Co., in order to address the areas concerning Financial Management and Value For Money assessment, carried out following activities:

- Group meetings with CHAI's Management, Stake holders, Financial management staff & other agencies & individuals
- Review the MoU & agreements between CHAI & RNE
- Review of Program Document
- Review of Periodic Budget
- Review of six monthly progress report
- Review of Audited financial statements
- Review of Accounting system of CHAI and related documentation
- Review of budgetary control system
- Field visit to take stock of activities on the ground
- Analysis of available documents and records

The review has its own limitation with respect to time and sampling. But we have tried to make sure that the sample selected is good enough to represent the population.

3. FINANCIAL REVIEW FINDINGS

3.1. Review of Agreement

- Article IV states that any interest accrued on the grant amount should be accounted for properly and should be used for the benefit of the programme, if agreed by parties in writing.

  During the first year of operation, such interest accrued was not accounted for in the books of accounts. This was also observed by the statutory auditor. CHAI has ensured that the interest for the year 2008 is reflected in the financial statement and accounted properly, but the interest earned for the previous period has not been accounted for.

- Article IV requires that CHAI should provide the financial and other resources required in addition to the grant as stated in Annex I.

  Annex I to the agreement requires that CHAI should contribute US $ 80,602/- towards this project, which further increases in the year 2009 and 2010. The financial statement for the year 2008 does not reflect any income from Clinton foundation, but the note no. 13 does mention that CHAI has contributed US $ 165,551 during the year 2008. We fail to understand why this income was not reflected in the financial statement, but has been represented as a note to accounts.

  We advise CHAI and RNE to resolve this issue. We are of the opinion that this income should be reflected in the financial statement and related expenses should also be part of the financial statement of the programme.

- Article VIII requires that CHAI undertakes to effect all procurements of goods and services for the implementation of the programme.

  It has been observed that considerable part of the funds is transferred to the district to support the activities of the district and there after the procurement of goods and services is carried out by the districts. As we understand correctly, CHAI representatives at the region are not involved in any procurement activity at the district level.

  We suggest that CHAI should make sure that there representative is part of the procurement process at the district level in case of major procurements and CHAI should ask for a copy of procurement process documented so that it can remain available for the auditors or the review teams.

- Article IX requires that Clinton Foundation should maintain a separate bank account for the Norwegian funds. It has been observed that CHAI does not maintain a separate bank account.

  We have been explained that the funds are transferred to the head office of Clinton Foundation in New York and there after remitted to the Dar es salaam account. Clinton Foundation has explained this fact to RNE and there has been an agreement to waive this requirement.

3.2. Review of budget and budgetary control mechanism

Both RNE and CHAI were aware that the budget and plans were prepared with a top-down approach. CHAI received inputs from the PMTCT unit as well as the regional health management team. However, local government structure at the district level and below were not involved.

We have observed that this has been one of the major risk factor affection the implementation of the plan.

We suggest that over a period, CHAI should try to see that the periodic budget and plans are prepared considering the inputs from the local government and district level.

3.3. Review of financial management system and accounting system

CHAI is maintaining proper accounting records. CHAI office in Dar es salaam is having qualified staff in the accounts department. The main role of the accountant in Dar es salaam is to maintain a cash book in excel sheet and send it to the HO of Clinton Foundation, which is responsible for doing the accounting.

Once the accounting transactions are processed, the General Ledger is sent back to the Dar es salaam office.

We have checked the accounting records and related documents for six months of 2007 and the entire year of 2008 and have following observations:

- CHAI do have accounting codes, but these needs a further improvement. Codes designed in the accounting system are having primary objective to identify expenses by expense heads, but this coding system fails to track the expenses to the activities.

  The budget presented for a program or for a particular period is always having reference to the Targets, objectives and specific activities. This is known as activity wise budget. To make it comparable and easy to analyse, it is always desirable to get a progress reports in the same format showing the progress of physical activity, actual expenditure and the variance.

  In the existing system at CHAI, there is no mechanism to track the expenses to the activities and thus comparing the actual expenditure with the budgeted expenditure for an activity is not possible.

  This makes it even more difficult to analyse the progress report and evaluate value for money.

  We were explained that the CHAI maps the expenses to the targets set for the purpose of progress report.

  We believe that the program is designed with targets and activities, where by combinations of activities results in to achievement of the target. Thus, overspending on a particular activity and not doing a particular activity would affect the achievement of the target.

  Considering the above facts we are of the opinion that it is very important to track the expenses to activities within each target and CHAI needs to work out a system to track

these expenses to the activities.

- We have observed that considerable amounts (US $ 1,009,910 in 2007 and US $ 776,655/- in 2008) are being spend through the districts or the regional local government setup. CHAI has very little control over the funds once they go in to the treasury of the local government.

  It has been further observed that lot of amount remains unspent and there are considerable delays in effecting the plans at the regional levels. This could impact the overall implementation of activities and finally the achievement of the targets.

  We were explained by CHAI management that they are aware of these limitations, but as a policy they would like to work with the regional and district authorities.

  CHAI has strengthened their capacity in order to ensure better monitoring, but we still feel that more needs to be done to ensure that funds provided to district are used as per plan and there are no delays in carrying out the planned activities.

  Eg. We observed that funds send to Mikindani Municipal Council in Matwara region during the 2nd quarter of 2008 were used for preparation and distribution of IEC material (Tshs. 2,430,000/-) and purchase of 3 computers (Tshs. 7,465,800/-). These expenses were not budgeted and donot fall under the CHAI program. Funds allocated for renovation of 8 rooms for HIV / AIDS activities were used for the above purpose and the renovation activity was not done. It has been explained that the renovation activity will be done through Joint Rehabilitation Fund and thus the funds were re-allocated.

- We have observed that amounts send to the district are accounted in the books of CHAI and the programme as amount spent for the activity. We believe that expense should be booked only when the amount is actually spent.

  We suggest that as and when the amount is transferred to the district, it should be recorded as imprest with the districts and should be shown as expense only when a report for the amount spent is received from the district.

  Another option would be to maintain separate record to monitor the movement of fund at the district and this report be part of the progress report and the audited financial statement. This would give more transparency and a better picture of the funds send to the districts.

- During our review of documents, we observed that certain payments to the suppliers were made on the basis of proforma invoice and no commercial tax invoice was obtained. We were given different explanations within CHAI management. Initially we were told that this is done to avoid payment of VAT and later on we were explained that this practice of making payment on the basis of proforma invoice is adopted to expedite the procurement process and there after the VAT exemptions are processed and final tax invoice without VAT are obtained.

  For the following expenses, we were not provided with the tax invoice. We suggest that CHAI should ensure that VAT exemption is obtained and a final tax invoice is obtained.

Date	Particulars	Amount US $
13/03/2008	Matwara RHMT – Davis &	7,054.91

	Shirtliff, Cost of Water pumps	
12/05/2008	Simply Computers, cost of installing software office 2003	2,145.00
24/10/2008	EFAM purchase of water tanks for mbawala chini project	20,465.21

- During our review we observed that certain expense entries are passed on the basis of instruction from the HO of Clinton Foundation. No documentation is available for such expenses recorded in the books of the project.

  We suggest that such expenses should also follow the normal accounting procedure of having a voucher and supporting correspondence or invoice.

Date	Particulars	Amount US $
20/06/2008	PC connection expenses	1,395.87
31/07/2008	AJE – Gordon Mara expenses	2,062.97
31/07/2008	PC connection expenses	1,281.00
31/12/2008	Transfer to NIMR as a CHAI expense	18,950.18

- During the review, we observed that there was certain non compliance with the statutory payments.

  Eg. Irregularity on deduction of tax on salary
  Non deduction of withholding tax on payment to consultants etc.

  We advice that CHAI should retain a tax consultant to take care of these things and ensure that there is irregularity with respect to the payment of statutory payments.

3.4. Review of budget, Periodic progress reports and Annual financial statements

As observed by the technical team as well, there was lack of consistency between the original program document and the objectives there in and the progress reports thereafter. This was mainly on account of the top – down approach for preparing the plans. It would be advisable to bring in consistency in the plans and the budgets with inputs from the local government and district level.

- PROGRESS REPORTS

We have further observed that periodic progress reports do give details of the activities carried out and the financial expenditure as well. But, there are two different reports and are not related to each other.

We suggest that the progress report should have an annex which is in the format of the planned activity and the budget and should present the actual performance in physical terms and actual budget in financial terms. This would make the report more comparable and easy for the users.

- ANNUAL FINANCIAL STATEMENTS

The auditor has done a good job by identifying the weaknesses in the accounting system and non compliance with the agreement. But the financial statements donot give any indication of activity wise expenditure. The auditors has tried to compare the total budge with the total expenditure and commented on the variances.

We suggest that the auditor should also incorporate activity wise report on the actual expenditure and the variances.

3.5. Cost benefit analysis / Value for money

Value for money is a very wide term. The perspective of value for money differs with different people.

What we have done is to see the quality of the management team, the systems and procedures used by the organisation, the transparency in the operations, procurement procedure and its effectiveness and physical verification of the activities been performed.

A major part of the funds were used for improving the infrastructure of health facilities in various districts. In order to address the issue of cost benefit and value for money, we visited certain location where the funds were used to improve the infrastructure for health facilities.

Visit to Tandahimba: - This is the place where a major construction activity was done. A new OPD has been constructed with a facility of 52 rooms. The intention of this development was to upgrade the hospital to a district hospital. As informed to us, there has been an increase uptake of service after this development, but no concrete statistical data is available.

In order to construct this hospital, tendering procedure was followed and the development has been of a good standard.
The benefit of investment in infrastructure will be realised over many years and considering the fact that the facilities may be used for next 20 to 25 years, one would say that the investment would realise value for money.

But, the concern remains of the maintenance of this facility. The district may not have fund allocation even to maintain such a big facility.

Newala and Nanguruwe Health centres: - Power water has been another major concern throughout this region. CHAI has done a commendable work by giving priority of providing this facility by installing solar power units.

We visited these two locations to check the physical existence and installation of solar power facility. The installations have really helped the working conditions in these health centres and have boosted the moral of the staff working there.

We have tried to analyse the amount spent on this activity. We have observed that the amount spent on each facility is at times more than the amount budgeted.

SUMMARY FROM THE WORK PLAN

Planned	Budgeted	Supplie		Budget	Actual	Variance

activity	cost per unit	r			Expenditure	
Solar installations at health centres	US $ 38,000	Ensol Ltd.	1 health centre	US $ 38,000		
Solar installations at dispensaries	US $ 10,000		4 dispensaries	US $ 40,000		
			TOTAL	US $ 78,000	US $ 110,600	US $ 32,600

Total expenditure for the activity of Solar installations has not been exceeded in value terms. The budget was US $ 866,000/- for 41 dispensaries and 12 health centres. Actual expenditure has been US $ 865,722/- but the physical installations has been less than the target.

Further, on our visit to the health centres and dispensaries, we asked the staff if they were trained for routine maintenance and we were informed that no such training was given.

These installations and infrastructural development also lack a priority with respect to maintenance in the district budgets.

CHAI has done their best with respect to the management of funds and activities, but certain inherent risks do raise a concern over the realisation of value for money in longer terms.

All these infrastructural developments would be really worth only if maintained properly and used for its optimum useful life.

In general, considering the quality of management of CHAI and their committement to the project, Norwegian funds are in safe hand and are being used diligently, but due to certain inherent limitations there arises an obvious question regarding the sustainability of these investments over its useful life.

Norwegian grant would get real value for money only if these infrastructural facilities are used for its useful life and the program has a lasting impact.

We recommend that CHAI should try to influence the district authorities to maintain these facilities so that the benefit is enjoyed for a longer period and secondly ensure that funds transferred to the districts are used as per plan and for the activities relating to the programme.

4. CONCLUSION AND RECOMMENDATIONS

The CHAI program has made considerable and commendable achievements in a short span of time. Among the most important is the scaling up of CTC and PMTCT services allowing many more people to have access to life saving care, treatment and medicine. Integral to this effort there is a range of important interventions such as training of staff, improving transport of CD4 samples, and installing solar power just to mention a few outstanding examples. The CHAI program and the way it is set up is praised and appreciated by most if not all partners in the two regions.

The financial management of the program is also in the hands of good management and qualified staff. Every effort is being made to optimize the returns and meet the budgets.
Nevertheless, the review team identified a few weaknesses, which can be improved upon. The major ones with respect to financial management are to track the expenses to respective activities, track and ensure proper utilization of funds at the district levels.

RECOMMENDATIONS

- CHAI's contribution should be reflected as income in the financial statement and related expenses should also be part of the financial statement of the programme.

- Article VIII requires that CHAI undertakes to effect all procurements of goods and services for the implementation of the programme.

  We suggest that CHAI should make sure that there representative is part of the procurement process at the district level in case of major procurements and CHAI should ask for a copy of procurement process documented so that it can remain available for the auditors or the review teams.

- CHAI should try to see that the periodic budget and plans are prepared considering the inputs from the local government and district level.

- We recommend that CHAI should design a coding system to track expenses to each activity so that it is possible to report actual expenditure and variance for each line of activity comparable to its budget.

- CHAI should ensure that funds provided to district are used as per plan and there are no delays in carrying out the planned activities.

- Amount transferred to districts or regions should not be booked as expense as soon as they are transferred, instead it should be recorded as imprest and booked as expense when the actual expenditure is incurred and activity has been carried out.

- CHAI should find out a mechanism to report the unspent amount with the districts and regional treasury and the activities pending at that end. This will help to know the real performance and activities performed.

- Format of the progress report should be improved to present activity wise expense and performance report, which shall make it very easy to compare the actual performance and actual expenditure with the budget. Further, it will also be easy to relate the activities performed and carried to the next period.

- With an objective to ensure that the programme over a longer period ensures value for money, We recommend that CHAI should try to influence the district authorities to maintain infrastructural development done through this programme, so that the benefit is enjoyed for a longer period and secondly ensure that funds transferred to the districts are used as per plan and for the activities relating to the programme.