



# **FINAL REPORT**



**on**

**Integrated HIV and AIDS Care Implementation Project  
at District Level**

**Prepared by the Zambian and Japanese team**

**March 2009  
Lusaka, Zambia**

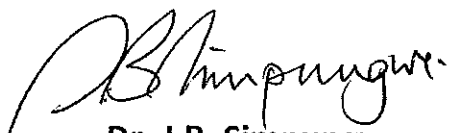


**WORD FROM THE PROJECT MANAGER BRIG. GEN. (DR.) J. B. SIMPUNGWE,  
DIRECTOR OF CLINICAL CARE AND DIAGNOSTIC SERVICES**

As Project Manager, of the Integrated HIV/AIDS Care Implementation Project, I am immensely excited that the project has fulfilled its objectives i.e. delivering quality services in counseling, testing, treatment and follow up of patients in rural settings to their door steps. The project brought to the fore, new frontiers in knowledge about the pandemic. For instance, the prevalence is not as low in the rural areas as was originally thought. People in the village setting are very supportive of each other and the issue of stigma is much less an issue as in urban centres.

The use of mobile services was not only beneficial in ensuring access to services by people in difficult to reach areas, but also allowed the subsistence farmers to concentrate on their economic activities as they could wait for services on an appointed day. Members of this out reach team availed themselves the opportunity to examine patients holistically. The mobile services were so successful that MoH and NAC will replicate the pilot to ten districts. I am glad to note that JICA will use their experience to assist and be part of this larger pilot project.

It is envisaged that more people will embrace preventive measures against HIV/AIDS, uptake of ART will be extended to all people who have reached the stage for treatment and finally will live longer productive lives.

  
**Dr. J.B. Simpungwe**



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## 1 Introduction

### 1-1 HIV/AIDS in Zambia at the time of project formulation

Zambia was recognized as one of the worst affected by the HIV/AIDS pandemic in Sub Saharan African countries. The national HIV seroprevalence among adults between 15-59 was 16% in 2001.<sup>1</sup> It was estimated that slightly over 1,000,000 Zambians were infected with HIV and 200,000 of whom were in need of Antiretroviral Therapy (ART). The fourth national Zambia Sexual Behaviour Survey (ZSBS) in 2005 revealed that nearly a quarter of children under 15 in urban households (22.0%) had lost one or both parents, compared to 16% of children in rural households. And nearly all communities (97%) had at least one death due to HIV/AIDS, and 66.3% had five or more deaths due to HIV/AIDS. Urban communities (89%) were more likely to have five or more deaths than rural communities (49%).<sup>2</sup> It is easy to understand how hard HIV/AIDS had impacted Zambian community.

The government of the republic of Zambia had committed herself to provide ART to 100,000 Zambians by the end of 2006 in the context of “3x5” initiatives, and the Ministry of Health (hereinafter the “MoH”) commenced the National ARV Programme in 2003 with a phased approach. In addition to this, the government had announced the free provision of ART to those who are in need, in an attempt to achieve the national target of the “3x5” initiatives followed by the Universal Access targets. The rapid expansion of ART in line with the each phased plan has been observed as the Table 1 below.

Table 1: Phased expansion of ART in Zambia, 2003-2006<sup>3</sup>

Phase		# of Facilities	# of Clients on ART
I	2003 Pilot Phase	2	2000
II	2004 Development Phase	10	15328
III	2005 Expansion Phase	107	39,351
IV	2006 Consolidation Phase	126	81,030

While the access to ART services is being expanded nationwide, various measures to facilitate sound and reliable service deliveries are sought. Development and periodical revisions of the national guidelines related to ART, creating a basic ART training resource package, setting up an ART centre

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<sup>1</sup> Zambia Demographic Health Survey 2001/2002, National AIDS Council, 2007, available at [http://www.measuredhs.com/pubs/pub\\_details.cfm?ID=403&srchTp=advanced](http://www.measuredhs.com/pubs/pub_details.cfm?ID=403&srchTp=advanced)

<sup>2</sup> Zambia Sexual Behaviour Survey 2005, Central Statistical Office and Ministry of Health, available at [http://zambia.jhuccp.org/resources/nac\\_pubs/](http://zambia.jhuccp.org/resources/nac_pubs/)

<sup>3</sup> Zambia Country Report: Multi-sectoral AIDS Response Monitoring and Evaluation Biennial Report 2006-07, National AIDS Council, 2008

accreditation mechanism, and strengthening ART information system (now called SMARTCARE) are a few of initiatives spearheaded by the MoH in order to create an enabling environment for the quality ART services deliveries.

In view of ensuring access and quality of rapidly expanding ART services, the Government of Zambia is keen to develop approaches to provide services through strengthening the existing public healthcare system. The Government committed to expand HIV testing and treatment facilities to all 72 districts and as close to the household as possible in the Fifth National Development Plan (2006-11)<sup>4</sup>, and national responses to HIV/AIDS led by the National AIDS Council (NAC) and the MoH is working on achieving such a goal. However, Zambia continues to face tremendous challenges with regard to the human resources for health. Chronic shortage of health providers at all levels of healthcare facilities in Zambia poses potential threats to the imperative characteristic of good ART services – sustainability. As any person started ART must continue the treatment for life, the mechanism that ensures service sustainability is urgently required to be in place.

## **1-2 Framework of the Project**

Based on the urgent needs of improving HIV and AIDS care services in the country, a request for the technical cooperation project was submitted by the Government of Zambia to the Government of Japan. And both Governments agreed on the formulation of the project, which aims at improving the quality and accessibility of HIV and AIDS care services in rural Zambia.<sup>5</sup>

The Ex-ante evaluation study team was dispatched from Japan to prepare the project in November 2005, and the draft of Project Design Matrix (hereinafter “PDM”), which guides through the project implementation, was developed. The Project was entitled “Integrated HIV and AIDS Care Implementation Project at District Level” (hereinafter “the Project”) and its period was decided as three years. Two districts, namely Mumbwa District in Central Province and Chongwe District in Lusaka Province, were selected as project sites to implement various activities related to strengthening HIV and AIDS care services. Primary beneficiaries of the Project include PLWHAs in above-mentioned two target districts, as well as the staff members of District Health Management Teams (DHMT) of Mumbwa and Chongwe.

Project purpose, overall goals, and seven outcomes in original project design are shown in Table 2.

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<sup>4</sup> Fifth National Development Plan for 2006-2011, Ministry of Finance and National Development, 2006

<sup>5</sup> Minutes of meeting between Japan International Cooperation Agency and Authorities Concerned of The Government of The Republic of Zambia upon Japanese Technical Cooperation for The Integrated HIV and AIDS Care Implementation Project at District Level

as follows. All the detail information including activities and inputs was shown in The PD M ver. 1, which is attached as Annex 1-2-1.

Table 2. Project purposes, overall goals, and seven outcomes in original design

<p><b>Overall Goal:</b> Interventions to improve the HIV and AIDS services for PLWHAs demonstrated at target districts are introduced in other districts.</p>
<p><b>Project Purpose:</b> <b>HIV and AIDS care services are improved and accessible at target districts</b></p>
<p><b>Outputs:</b></p> <ol style="list-style-type: none"> <li>1. Access to HIV counseling and testing is improved in order to detect HIV infection more and earlier.</li> <li>2. District Hospitals and referral health centers are strengthened to provide appropriate care services to PLWHAs.</li> <li>3. Standard ART services are decentralized and scaled-up.</li> <li>4. Quality of TB and TB/HIV services are improved.</li> <li>5. Necessary management capacities of DHMTs to strengthen HIV and AIDS services are enhanced.</li> <li>6. Innovative approaches to improve the HIV/AIDS situation are identified through OR.</li> <li>7. Networking with concerned organizations are strengthened at central level.</li> </ol>

To respond to the rapidly evolving situation around HIV/AIDS care services in Zambia, the Project required to modify the Project plan. For example, the Project started supporting the mobile ART services in rural area instead of having regular ART centres in the rural health centres (hereinafter “RuHCs”) as a response to the Accreditation Guidelines of ART services drafted in 2006. The mobile ART team consists of medical doctors, nurses and counsellors etc. has been formed within each DHMT, and the team pays regular visits to selected RuHCs in order to provide ART and other services for eligible PLWHAs in the respective health centre’s catchments area. The concept of Mobile ART services is shown in Box 1. The PDM was revised at the joint mid-term evaluation in November 2007. Revised outputs and activities are shown in Table 2. PDM ver. 2 is attached as Annex 1-2-2.

Box 1. Concept of Mobile ART service

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>✓ ART services at Health Centre level, of which implementation is supported by the DHMT’s “Mobile ART Team” consisting of healthcare providers for ART, laboratory services and technical assistance.</li> <li>✓ The service provision team is mobile but the services site must be static, i.e., Rural Health Centre in order to ensure sustainability of the services.</li> <li>✓ Through the support of the Mobile ART Team, the ART programme aims to strengthen capacities of hosting Health Centre as the mobile ART site.</li> <li>✓ ART clients are registered under each Health Centre with mobile ART services, and taken care by the Health Centre’s Staff.</li> </ul> |
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Table 3. Revised outputs and activities

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**Project Purpose:**  
**HIV and AIDS care services are improved and accessible at target districts**

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**Outputs:**

1. Access to HIV counseling and testing is improved
2. Quality HIV care services are strengthened and scaled-up
3. DHMT's management capacities in HIV care services are enhanced
4. Lessons learned by the Project are incorporated into national guideline on mobile ART services

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**Activities:**

- 1-1 To identify and provide training for lay counselors
- 1-2 To train more professional counselors
- 1-3 To promote Diagnostic Counseling and Testing (DCT), Prevention of Mother to Child Transmission(PMTCT) in health facilities such as TB,STI and Antenatal clinic
- 1-4 To introduce the Finger Pricking HIV testing in health centres
- 2-1 To provide mobile ART services
- 2-2 To conduct training for the health facility staff on HIV/OIs management
- 2-3 To conduct training for community members such as adherence counselors in HIV/AIDS services
- 2-4 To conduct regular supervisory visit to health facility by DHMTs
- 2-5 To strengthen the health system at health facility level such as diagnostic capacity, transport, infrastructure, etc.
- 2-6 To conduct training in TB and other OIs management for PLWHAs
- 3-1 To conduct \*trainings for DHMT staff to improve necessary management skills for strengthening HIV care services
- 3-2 To conduct quarterly meetings
- 3-3 To conduct Operational Research
- 4-1 To conduct monthly meetings at national level
- 4-2 To compile the lessons learned, and conduct workshop to disseminate the lessons learned for their incorporation in national guidelines
- 4-3 To participate in the working group for development of national guideline on mobile ART services

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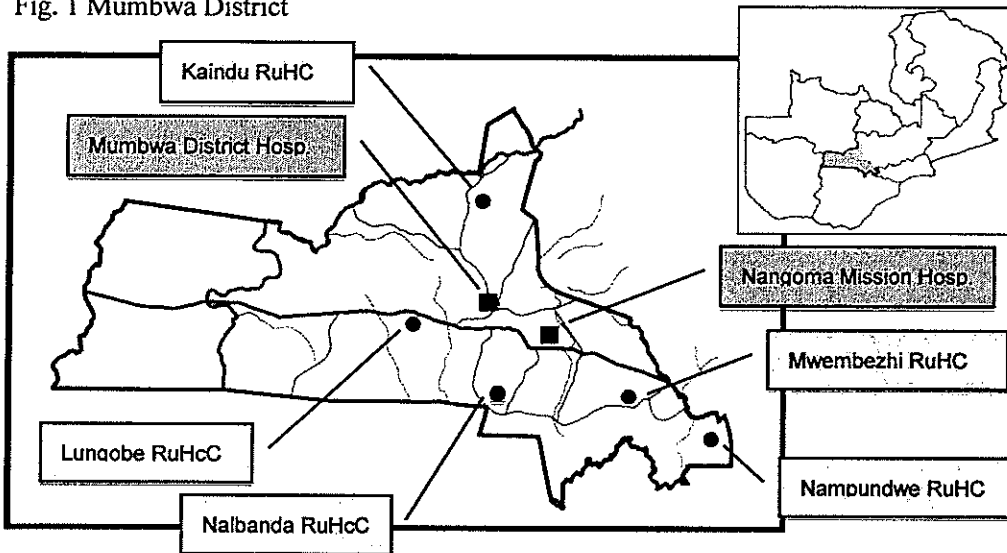
### **1-3 General information of project sites**

#### **(1) Mumbwa district**

Mumbwa District is one of six districts in the Central Province of Zambia; with the District town located about 150km west of Lusaka. About one-third of the District belongs to the Kafue National Park, which is the largest national park in the country. Transportation in the District is almost exclusively served by the Mongu Road which runs across the District east-west, leaving the area not connected to this particular road extremely hard to reach. The population of the District is reported rapidly increasing, with the discovery of new copper mines and quality land for cropping. Current population of the District is officially recognized to be around 167,000, though some expect it to be much higher, between 170,000 to 240,000, depending on the statistics. It is also believed that many seasonal workers including miners and cane cutters reside in the District in their peak seasons. Based on various studies including the sero-surveillance survey among pregnant women, the adult HIV prevalence rate in Central

Province was estimated at 11.3% in 2005.

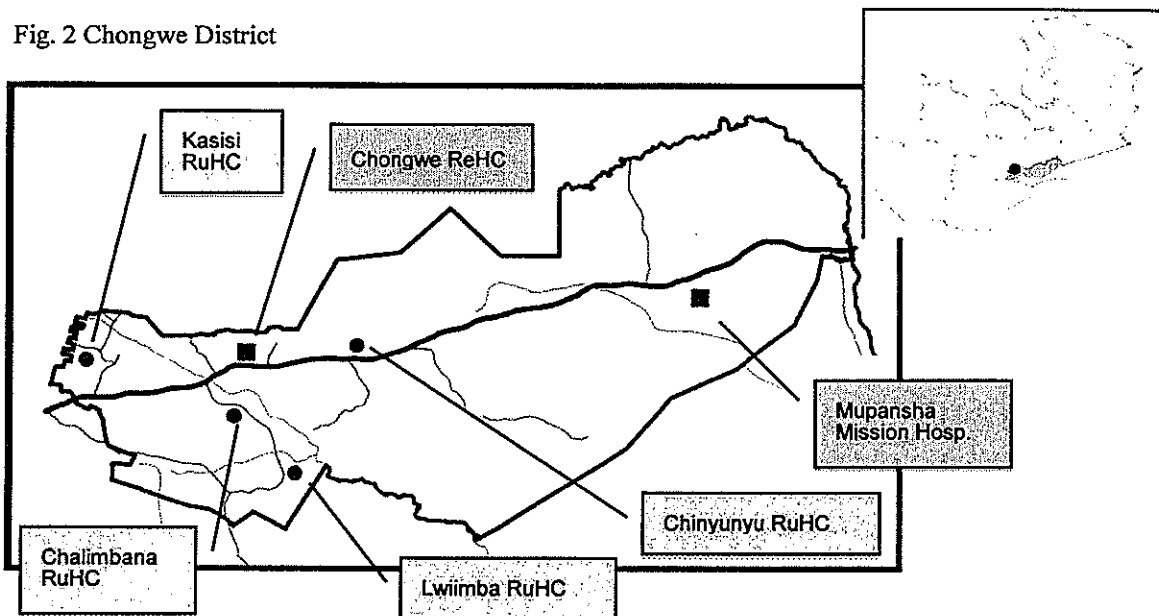
Fig. 1 Mumbwa District



(2) Chongwe District

Chongwe is a district belonging to Lusaka Province of Zambia; with the District town located about 48km east of Lusaka. Similar to Mumbwa district, transportation in Chongwe District is almost exclusively served by the Great East Road, which runs across the District west- east, leaving the area not connected to this particular road extremely hard to reach. Current population of the District is officially recognized to be around 196,999 as of 2007. The adult HIV Prevalence rate in Lusaka Province was estimated at 19%.

Fig. 2 Chongwe District



## **2. Activities**

In order to accomplish the Project Purpose, various activities have been conducted by the Project. Those activities are written in a time series way as follows.

### **2-1 Situation analysis (Annex 2-1)**

The Project has been started in April, 2006. When the Project was commenced, there were two ART providing facilities in Chongwe district, that is, Chongwe Referral Health Centre (hereinafter “ReHC”) and Mpanshya Mission Hospital (herein after “MH”), and only one in Mumbwa district, that was Mumbwa District Hospital (hereinafter “DH”). Just after the commencement of the Project, CIDRZ (an American NGO) started the support for Chongwe ReHC in July, 2006 in the field of ART, TB/HIV and PMTCT. Nangoma MH, which is supported by CHAZ<sup>6</sup>, started ART service in July, 2006 in Mumbwa District. The situation analysis was conducted from August to October, 2006 in both districts by the Project concerning ART and TB/HIV for the Project implementation. The results revealed that there were several urgent issues to be solved such as data management in both districts. The governmental ART registers had been used in Mumbwa DH and Mpanshya MH, but the recording was not satisfactory with lots of missing information. In Chongwe ReHC, CIDRZ introduced its own information system that was computerized, and then it was difficult to access to the data for the Project. Nangoma MH was also using its own data management system which had some defects with inadequate information. These results were reported to the Project members in the Project’s regular meeting at the MoH headquarter, so that these problems should be solved to improve the data management for the Project sites.

### **2-2 Various trainings for the provision of ART service**

In order for the Project to be implemented, that is, for ART service to be expanded to RuHCs, certain health staff, medical or non-medical, must be provided with certain trainings depending on their necessities. For instance, the training of ART/OIs management should be given to medical staff such as clinical officers, nurses, etc. Training of counseling are planned to be provided to community people as well as professional medical staff. The MoH had a plan to develop ART/OIs training package based on WHO’s IMAI<sup>7</sup> training material, which was supposed to be adopted for the trainings in the Project. However, the development of this training package by the MoH was delayed and could not be utilized by the Project (As a matter of fact, it has not been developed until now, as of March, 2009.). Therefore, the Project decided to utilize the existing training course at Chainama college after the investigation of

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<sup>6</sup> Christian Health Association of Zambia

<sup>7</sup> Integrated Management of Adult Illness

training availability in Zambia, which is one of the governmental institutions. Other trainings such as Counseling, Finger Pricking method, Adherence Counselors and DCT were planned and given to the staff in the Project (Refer to Annex 2-2-1). Further, trainings abroad were provided for the capacity development of the staff at the MoH headquarter as well as both DHMTs. Those are; trainings in Japan and in Thailand. The participation to international conferences were also utilized for this purpose (Refer to Annex 2-2-2).

### **2-3 Preparation/ Plan and commencement of “mobile ART service”**

The Zambian Government has drafted the Accreditation Guidelines concerning ART centres in August, 2006 (dated May, 2006) which stipulate certain criteria for ART centres in Zambia. In order to respond this and to pursue the Project purpose at the same time, the Project has decided to adopt the mobile ART service in both Chongwe and Mumbwa District. In order to implement this method: mobile ART service, the Project started making the detailed schedule, such as which RuHCs to be selected as mobile ART centres, what kind of trainings should be provided for health staff, when to start, etc.

(Annex 2-3. Also see Box 1. In introduction section for the concept of mobile ART service).

In order to implement this method, the transportation is indispensable, so that a 4 wheel vehicle was provided to both districts, respectively. The supply of a CD4 machine to Chongwe ReHC was prepared.

Mumbwa DHO opened its mobile ART centres according to its schedule, that is, Lungobe RuHC in Feb. 2007, Nampundwe RuHC in Feb. 2007, Mwembezi RuHC in May and Kaindu RuHC in July, 2007, while Chongwe DHO opened 4 mobile ART centres at the same time; these were Kasisi, Chinyunyu, Chalimbana and Lwimba RuHC in February, 2007. Chongwe DHO had many challenges to be overcome. The biggest one was its data management. Chongwe ReHC managed the clients information with a computer at ReHC supported by CIDRZ. Neither ART register books, nor patients files were kept at mobile ART centres at the beginning.

### **2-4 Management of mobile ART service**

In order to manage the mobile ART service effectively, efficiently and properly, some devices/contrivances have been made by the Project. Those are;

(1) ART signboard:

Each mobile ART centre has one, respectively, so that the mobile ART day can be shown clearly on it. ART clients, community people can know when to come to the centre next.

This board can deliver information on ART to the community as well.

(2) Appointment Book:

The Project introduced a diary to each mobile ART centre, so that every client can be followed up properly. The centre staff in charge makes a list of clients on this appointment book which is designed to show clients for HIV testing, regular follow-up and refill of ARVs, etc. separately. When a client comes to the service, his/her next visit day is denoted on the respective page on the diary, which makes the list of clients automatically on that day. If a client does not show up on the appointed day, this client can be followed up immediately, so that the trace of clients can be done to minimize the loss of adherence.

(3) Schedule table:

The mobile ART day at each mobile ART centre is fixed and done every two weeks for the proper management of ART clients. It is important for the centre staff to visualize their own schedule, so that they can prepare their own jobs and deliver proper information to their clients.

(4) Daily Activity Register:

This is a governmental register book on ARVs kept by pharmacy staff at DH/ReHC. The Project produced this register book with each page duplicated. When ARVs are delivered to clients, the information on it is recorded on this register at mobile ART centre, and one page is cut off from the book and brought to the District pharmacy, leaving the copy of the page kept at the mobile ART centre for clarification/accountability.

(5) Adherence monitoring tool:

Self report by clients, pill counts and diary are used for the evaluation of adherence of clients in this monitoring tool.

<Other means/improvement to be implemented for better mobile ART service>

(1) Improvement of the visiting time of the mobile ART team:

The mobile ART team from DH/ReHC often visits the mobile ART centre late, keeping clients waiting for a long time. This discourages the clients and can be a reason of producing defaulters. Since the mobile ART days are fixed and known beforehand, the team must be able to visit the sites at proper time without keeping clients waiting too long. Preparation of things to be brought and arranging the team members, for instance, must be done properly by the managing staff for the mobile ART service.

(2) Information sharing between mobile ART team and centre staff:

It sometimes happens that the mobile ART centre staff are left uninformed of the clients' information after the mobile ART day. This is because of insufficient information sharing between the mobile ART team and the mobile centre staff. After the end of the mobile day, it is recommended, for instance, to have even a short meeting between two parties to share

information on clients and the day's service.

(3) Keeping the log book by the mobile ART team:

It is important to keep the record on daily service by the team for future use and better service. A person in charge in the mobile ART team should keep the record on, for instance, how many clients are reviewed, how many clients are collected blood for CD4 count, comments in particular if exist, etc.

(4) Regular supervision/monitoring to mobile ART centre by DHO staff:

DHO staff (DDH or TB/HIV focal person) and JICA experts paid joint supervisory visits to mobile ART centres several times, especially before District ART Review Meeting. The supervision is indispensable for the improvement of recording on register books, for the grasp of issues/problems encountered by centre staff, encouraging them toward their positive attitude, etc.

#### **2-5 Quarterly ART review meeting**

The Project decided to have the quarterly meeting (later called "ART Review Meeting") in both Chogwe and Mumbwa District, respectively in order to share information concerning HIV care among ART staff in DHO, DH/ReHC and mobile sites. It is necessary to have common knowledge to do proper data management as the whole district. It must be shared among all staff concerned to keep proper recordings on ART register books. All staff should know how to record, for instance, ART register number, Transfer-In clients, functional status of clients on ART, etc. Further, it is necessary to solve any problems encountered by ART centres' staff for better management. Both districts held quarterly "ART Review Meeting" (Mumbwa 5 times, Chongwe 4 times) until the end of the Project. The Project (DHO member and JICA experts) jointly paid supervisory visits to mobile ART centres before having ART Review Meeting, so that the problems to be solved could be grasped. It might be necessary to improve the quality of those meetings, since the problems which came to be known had not been discussed adequately in ART Review Meetings.

#### **2-6 Improvement of data management in Chongwe district**

As already mentioned in 2-1 and 2-3, Chongwe District had difficulties and problems in its own data management. When CIDRZ started the support for Chongwe ReHC in July, 2006 just after the commencement of the Project, Chongwe ReHC became dependent on the computerized data management by CIDRZ, putting aside its own system. It became extremely difficult for the Project to access to the ART clients information that was put into the computer at ReHC, and managed by the data input clerk

hired by CIDRZ. The Project discussed this issue with DHO and CIDRZ in order to solve the problems, so that the clients information became available in order to monitor the Project. All ART register books and clients files were kept at ReHC, and the mobile ART team from ReHC brought them to mobile ART centres on mobile ART days. The team brought them back to ReHC when the service was finished at mobile ART centres. After some discussions, DHO agreed to put ART register books and clients files at respective mobile ART centres in November, 2007 when the mid-term evaluation team visited. There remained, however, many issues to be solved. The recording on the ART register book was far from adequate, and there were confusions in sorting out clients files to respective mobile ART centres. All of those clients files were kept at ReHC before. After a long process, all clients files are sorted out and put at proper mobile ART centres, respectively, and ART register books were installed at each mobile ART centre now. It is, however, impossible to retrieve some missing information on ART clients previously registered at Chongwe ReHC, which makes the data analysis difficult for the ART clients who were registered before the improvement on management.

The data management for newly registered clients at each mobile ART centre as well as ReHC can be done properly, so that the analysis of those clients data are possible.

This experience has taught us important lessons. We have to be very careful for the data management from the beginning. Once it was messed up, it is not easy to recover the clients information and to put it in order.

## **2-7 Further expansion of mobile ART centres**

Both Chongwe and Mumbwa District started their mobile ART service fully in February, 2007. Mumbwa District opened its mobile ART centres one by one according to its expansion plan, and had 4 mobile sites by July, 2007, while Chongwe opened 4 mobile ART centres at once as described in 2-3. Both districts put emphasis on stabilization of respective mobile ART centres for a while.

Mumbwa District opened its 5<sup>th</sup> mobile ART centre; Nalubanda RuHC in August, 2008. It took almost one year for Mumbwa DHO to open its 5<sup>th</sup> centre since Kaindu mobile ART centre was opened in July, 2007. There were some issues to be considered such as training for centre staff, budget, improvement of recording on ART register books, etc. Nangoma MH in Mumbwa started the provision of ART service in July, 2006. This hospital is supported by CHAZ. Mumbwa DHO had some discussions with Nangoma MH before it opened its mobile ART centres. Nangoma MH agreed to follow the way Mumbwa DHO runs the mobile ART service. For instance, both the governmental ART register books and patients files are kept at mobile sites, and the mobile team takes clients information by copying the SMARTCARE sheets in use. With adequate discussions and understanding, Nangoma MH opened its

mobile ART centres; Sichobo RuHC and Keezwa RuHC in December, 2008. There are two static ART centres in Mumbwa, that is, Mumbwa DH and Nangoma MH, plus ZAF<sup>8</sup> clinic. Mumbwa DHO runs 5 mobile centres and Nagoma 2 centres. In all, there are 10 ART providing facilities in Mumbwa district.

Chongwe DHO runs 4 mobile centres now, and have a plan to open another static ART centre soon; Kanakantapa RuHC which has a laboratory equipment, although it must depend on Chongwe ReHC laboratory for CD4 and biochemical testing such as creatinine, liver function, etc. There is a hospital called Mpanshya MH in the eastern part of Chongwe District which is supported by CHAZ just as Nangoma MH in Mumbwa. Mpanshya MH started ART service in 2004, and mobile ART service in 2006 in 4 outreach sites. Mpanshya MH runs its mobile ART service in their own way different from DHO's. The mobile ART team from the hospital visits its respective mobile site one a month, and utilized churches, schools, etc. as ART facilities. Therefore, there is no capacity building done to the MoH staff at RuHCs. Besides, the ART register books and patients files are kept at MH. The team records clients information on notes and transfers them to the register book and patients' files at MH when the team goes back to the hospital. There is no way to leave clients information at outreach sites, naturally. This creates some important problems when it comes to the management of clients. These issues must be discussed between Chogwe DHO and Mpanshay MH, and solved for better management of clients. The data management must be unified and collected to DHO as the entire district. It is required for Mpanshya MH to participate in District ART Review Meeting and discuss positively these issues in order to solve for the better management of clients.

## **2-8 Mobile ART guidelines**

The MoH and NAC held the first taskforce workshop in February, 2008 for the national guidelines of mobile ART, PMTCT and VCT. The Project participated in this workshop, and Director of District Health of Mumbwa; Dr Dube made a presentation on achievements and experiences on mobile ART service in Mumbwa District. The Project method, then called "Mumbwa model" has some unique aspects in that the mobile ART service is run only by DHMT staff, providing capacity building to mobile ART centres staff as well as DHMT staff at the same time by giving various trainings depending on necessities. The running expense of the service is taken from the annual budget of DHMT. Therefore, this mobile ART service utilizing the existing system of the MoH is sustainable. The presentation was received by most participants with favors. MoH and NAC held another workshop in December, 2008 in order to draft the national guidelines for mobile services (ART, VCT and PMTCT). The basis of the

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<sup>8</sup> ZAF: Zambia Air Force



guidelines for the mobile ART service was drafted by the Project and submitted for further discussions in the workshop. The MoH and NAC are now finalizing the national guidelines for “mobile ART, PMTCT and VCT operational guidelines” which will soon be printed out and delivered to all parties concerned.

## **2-9 Operational Research**

The Project has decided to carry out systematic evaluation of the mobile ART service programme. The Project made a protocol of operational research (hereinafter “OR”) in the Project which has been authorized by the MoH. Main objectives of OR are;

- (1) To assess quality of HIV testing using Finger Pricking method in HIV testing by non-medical staff.
- (2) To evaluate treatment outcomes of ART (in terms of continuation of ART without default/death) under the ART programme at peripheral facilities of primary health care (“mobile ART service programme”) in the districts.
- (3) To evaluate implementation of HIV care (HIV testing and ART) to TB patients under the mobile ART service programme.
- (4) To investigate how traveling cost/time required to receive ART after the introduction of the mobile ART service programme.
- (5) To explore the possible ways of regular ART service in rural settings.
- (6) To accumulate lessons learnt from the mobile ART service which could be expected to be introduced nationwide.

The Project held “Dissemination Workshop” on May 6, 2008 concerning the mobile ART service in order to share the lessons learned from the Project activities among concerned parties, although the data collected were still preliminary due to the short observation period. (See Annex 2-9-1; Protocol of OR, Annex 2-9-2; “Report on Mobile ART service in Mumbwa District: Lessons Learned, and Annex 2-9-3; Report on the Workshop) The Project participated in the following “International Conferences” in order to make presentations on OR.

- (1) No. 38 IUATLD Conference in Cape Town, South Africa, November 2007 (Annex 2-9-4)  
Title of presentation: Improvement of TB/HIV situation at Rural Health Centers by Mobile ART clinic
- (2) No. 39 IUATLD Conference in Paris, France, October 2008 (Annex 2-9-5)  
Title of presentation: Assessment of Improvement of TB/HIV care service in districts where mobile Anti-Retroviral Treatment (ART) service has been introduced
- (3) No. 15 ICASA Conference in Dakar, Senegal, December 2008 (Annex 2-9-6)

Title of presentation:

- a. ART expansion to rural health centre by mobile ART service in Mumbwa District, Central Province, Zambia
- b. Research on how ART clients can remind themselves of the time to take ARVs in Mumbwa District, Central Province, Zambia

Those ORs had been continued until the end of the Project, and the final results were presented in “Wrap-up Workshop” held in Mar. 17, 2009 in Lusaka, Zambia. (Annex 2-9-7; presentations and report). The results of ORs have shown the validity and effectiveness of mobile ART service that has been introduced by the Project in both Chongwe and Mumbwa District. The lessons learned by the Project have been documented and incorporated into the “Mobile ART Guidelines” by the MoH which will soon be published and delivered to the partners concerned. The MoH will expand ART service to rural areas where more intensive input is necessary to deliver ART service to rural community in Zambia. The mobile ART service by the Project will be adopted for this purpose by the MoH who has its plan to strengthen ART service in 10 rural districts by the mobile ART service using Global Fund R4 budget.

#### **2-10 Revision of PDM and Plan of Operation**

Since the Project was started in April, 2006 with PDM version 1 (Annex 1-2-1), some modifications became necessary in the Project design. That was because there were some important changes in circumstances in Zambia, one of which was the publication of the Accreditation Guidelines for ART centres by the MoH in August, 2006. According to the guidelines, all of rural health centres (RuHCs) in both districts could not be ART centres on their own, which consequently made the Project introduce the mobile ART service to those RuHCs. PDM ver. 1 was revised and became PDM ver. 2 (Annex 1-2-2) when the mid-term evaluation was done in November, 2007. The provision of mobile ART service was clearly written in activity 2-1. Further, Output 4 mentions that the lessons learned by the Project should be incorporated into the national guidelines on mobile ART services.

Plan of Operation was also revised according to the revision of PDM. Each Annual Plan of Operation is shown in the attached (Annex 2-10-1, 2-10-2, 2-10-3).

#### **2-11 Joint Coordinating Committee Meeting (JCC)**

JCC was held three times during the Project term. The 1<sup>st</sup> JCC was held almost one year after the commencement of the Project. The 2<sup>nd</sup> JCC was convened during the Project Mid Term Evaluation and the 3<sup>rd</sup> was held during the Project Terminal Evaluation.

Each program and the agenda are shown in the attached Annex 2-11-1, 2-11-2, 2-11-3.

### **3 Inputs**

During the project term, both the Zambian side and the Japanese side contributed various inputs and the Project operated within the existing system of MoH and DHMTs and utilised existing resources, which contributed to efficiency as well as sustainability.

#### **3-1 Inputs from the Zambian side**

(1) Zambian members assigned to the Project:

Fifteen (15) staff members of the MoH, the District Health Management Teams (DHMTs) of Chongwe and Mumbwa Districts and the National HIV/AIDS/STI/TB Council (NAC) have been assigned to the Project. The list is shown in Annex 3-1-1.

(2) Provision of the project office and equipment:

An office space for the Project was provided in the Ministry of Health together with utilities. Necessary commodities for provision of ART/VCT at district level were made available through the national health logistics system. Vehicles of the DHMTs are utilised for mobile ART services.

(3) Operational expenses:

Operational expenses for the Project from the Zambian side amounted to ZMK227,052,400 (Chongwe: ZMK84,068,800; Mumbwa ZMK142,983,600) as of the end of December 2008, which is approximately USD42,000 (US\$1.00=Kwacha 5,400). It included fuel for the vehicles utilised for the mobile ART services and expenses of training such as transportation cost and allowance for the trainees. The details are shown in Annex 3-1-2.

#### **3-2 Inputs from the Japanese side**

(1) Dispatch of experts:

Four long-term experts have been assigned to the Project. Their job titles are Project Coordinator/Community Participation, Infectious Diseases Control/Health Planning, HIV/AIDS care and Project Coordinator/Monitoring. To date, seven short-term experts in total were dispatched in the technical areas of HIV/AIDS Care, Operational Research, TB/HIV Control, HIV/AIDS Management, Information Education and Communication, and PMTCT. Total working days spent by the short-term experts were for a total of 7.2 person/month (= 216 days). The details are shown in Annex 3-2-1.

(2) Counterpart training

To date four Zambian project members participated in overseas training courses: two in Japan and two in Thailand. In addition to these trainings, The Zambian project members participated in international conferences held in South Africa, France and Senegal (Refer to Annex 2-2-2).

(3) Provision of equipment

The cost of equipment directly provided by Japan to the Project amounted to approximately USD270,400 in total. The details of the equipment are described in Annex 3-2-2.

(4) Operational expenses

The operational expenses for the Project borne by the Japanese side since the beginning of the Project to the end of March 2009 is Kwacha 1,560,000,000. The details are shown in Annex 3-2-3.

## **4 Outputs**

The Project has made considerable progress towards achievement of the Project's Outputs. Most of the indicators of Output 1 and 2 regarding improvement of access and quality of HIV care services have been achieved. Output 3 regarding DHMT's management capacity in HIV care services has been achieved. Output 4 aiming at incorporation of lessons learned from the Project into the national mobile ART guidelines is likely to be achieved in near future.

The detail information such as project indicators is shown in Annex 4-1 for Chongwe and Annex 4-2 for Mumbwa..

## **5 Conclusion**

The Project has successfully implemented all planned activities despite the number of difficulties and hindering factors. And the project has clearly shown that access and quality of care in rural districts can be enhanced by Mobile services run from the District Health Management Team. Defaulter rate in rural area is potentially a problem as people walk long distance, therefore accessibility to HIV care is paramount. The effectiveness of the mobile ART services model developed by the Project has been verified for the future duplication in other districts.

However, the mobile ART services model developed by the Project should be continuously monitored and evaluated, in order to evolve with the changing circumstances, including the rapid increases of the number of ART clients.

## **6. Lessons learned**

- (1) In the formulation stage of the Project, it would have been necessary to have more detailed analysis of the situation of the HIV/AIDS care in Zambia and the target districts through more rigorous discussions with the counterparts-to-be. It could have avoided having some irrelevant activities and indicators in the PDM version 1.
- (2) More discussions would have been necessary for the selection of the counterpart members and their expected roles in the Project. Not all members listed in the Record of Discussions are aware of their roles in the Project and are involved in the Project.
- (3) Some Project activities were affected due to delayed formation of the Japanese Project team and suspension of national guidelines of Zambia.
- (4) Considering the nature of ART services, any project that supports ART services shall be planned for adequate duration of time, as the duration given to this Project (three years) was not adequate. Properly evaluating the long term results and impacts of ART services requires adequate implementation period.
- (5) The mobile ART services model developed by the Project utilising existing resources and ensuring sustainability is found as one of effective methods in decentralisation of treatment, especially in resource-limited settings.

(End)

## **Acknowledgement**

The Project would like to express heartfelt thanks to the staff of MoH, JICA and other partners who actively contributed to and participated in the implementation of the project.

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## Project Design Matrix (PDM)

Project Name: Integrated HIV and AIDS Care Implementation Project at District Level

Project Period: April 2006- March 2009 (3years)

Annex 1

Date: March, 2006

Target Groups: ① PLWHAs (Estimated 29,000 persons<sup>1</sup>) ② DHMTs at district level (About 300 professional staff)

Target Area: Chongwe and Mumbwa Districts

Overall Goal	Narrative Summary	Objectively Verifiable Indicators <sup>2</sup>	Means of Verification	Important Assumptions
Interventions to improve the HIV and AIDS care services for PLWHAs demonstrated at target districts are introduced in other districts	Number and contents of interventions introduced in other districts	1 Record of Ministry of Health and National HIV/AIDS/STI/TB Council	1 HIV/AIDS policy of the Government of Zambia, including free provision of ARV drugs, does not change significantly	
Project Purpose HIV and AIDS care services <sup>3</sup> are improved and accessible at target districts	1 Number of death of PLWHAs while on care/ Total number of enrolled PLWHAs 2 Population coverage by HIV and AIDS care services in the targets districts 3 Case detection rate of HIV positive (Number of HIV+ detected / Estimated sero prevalence of HIV+)	1 Record of district hospitals and health centers 2 Record of district hospitals and health centers 3 Record of district hospitals and health centers	1 HIV/AIDS policy of the Government of Zambia, including free provision of ARV drugs, does not change significantly	
Outputs				
1 Access to HIV counseling and testing is improved in order to detect HIV infection more and earlier	1-1 Number of people counseled and tested 1-2 Percentage of HIV tested among TB, STI, ANC clinic 1-3 Proportion of clinical stage 1 & 2 (WHO criteria) among all the HIV detected 1-4 Percentage of referred PLWHAs among all the HIV detected	1-1 Record of health centers 1-2 Record of district hospitals/ referral health centers 1-3 Record of district hospitals/ referral health centers 1-4 Record of district hospitals and health centers	1 Necessary amount of ARV drugs is available at target districts 2 Concerned non-governmental organizations, including mission hospitals, at districts are cooperative to HIV/AIDS related activities of DHMT 3 The political, economic, and social situation is not severely worsened than at the commencing time of the Project 4 Number of new infection is not increased rapidly	
2 District hospitals and referral health centers are strengthened to provide appropriate care services to PLWHAs	2-1 Number of PLWHAs received ART eligibility 2-2 Number of PLWHAs screened with CD4 count 3-1 Number of health centers with ART program 3-2 Number of ART patients 3-3 Adherence rate of ART is over 95% 3-4 Case mortality rate of ART patients 3-5 Percentage of health centers having community participation 3-6 Number of ART patients under DOT	2-1 Record of district hospitals/ referral health centers 2-2 Record of district hospitals/ referral health centers 3-1 Record of health centers 3-2 Record of health centers 3-3 Record of health centers 3-4 Record of health centers 3-5 Record of health centers 3-6 Record of health centers		
3 Standard ART services are decentralized and scaled-up	4-1 TB Cure (Treatment success) rate 4-2 Number of sputum examination 4-3 Number of case detection of TB 4-4 Percentage of TB patient receiving HIV counseling and testing 4-5 Percentage of PLWHAs receiving TB screening 5-1 Degree of capacity building 6-1 Number of OR conducted and reported 7-1 Degree of Networking	4-1 District Health Office 4-2 District Health Office 4-3 District Health Office 4-4 District Health Office 4-5 District Health Office 5-1 Checklist developed by the Project 6-1 Project Report 7-1 Checklist developed by the Project		
4 Quality of TB and TB/HIV services are improved				
5 Necessary management capacities of DHMTs to strengthen HIV and AIDS care services are enhanced				
6 Innovative approaches to improve the HIV/AIDS situation are identified through OR				
7 Networking with concerned organizations is strengthened at central level				

Activities	Narrative Summary	Objectively Verifiable Indicators <sup>1</sup>	Inputs	Means of Verification	Important Assumptions
1-1	To identify and provide training for lay counselors <sup>4</sup>	Japanese Side 1 Dispatch of experts	Zambian Side 1 Assignment of counterpart personnel at central and district level	1 Frequent transfer of trained personnel at district level does not occur	
1-2	To conduct exchange visits for lay counselors	(1) Long-term Expert (3 person)	2 Provision of land, spaces, and other necessary facilities at central and district level	2 Medical technology regarding HIV and AIDS services does not significantly change	
1-3	To train more professional counselors	Health Administration/Infectious Disease Control, HIV/AIDS Care, Coordinator/Community Participation	3 Allocation of operational costs for the Project		
1-4	To conduct quarterly review meetings for counselors	(2) Short-term Expert TB/HIV Control, TB/HIV Laboratory, Laboratory Quality Assurance, Logistics, Health Management, Advocacy/IEC, OR and others			
1-5	To conduct orientation courses on Counseling and Testing at community level	2 Provision of equipment CD 4 Counters, HIV test kits, x-ray machine, Other laboratory equipments, Vehicles, Office equipment, Audio/visual equipment, Computers, and others			
1-6	To promote Recommended/ Routine Counseling and Testing in health facilities such as TB, STI and Antenatal clinic	Training of counterparts in Japan and third country (ies) About 1-3 persons/year			
1-7	To introduce the Finger Pricking HIV testing in health centers	4 Dispatch of study team when necessary			
1-8	To ensure to refer the HIV detected to the district hospitals/referral health centers	5 Allocation of operational costs for the Project			
2-1	To install and provide guidance for maintenance for necessary medical equipment, such as x-ray machine, CD4 Counter, and others, at district health centers/ referral hospitals				
2-2	To conduct training for staff of the district hospitals/ referral health centers on HIV/ART management, including prevention and care for opportunistic infections				
3-1	To conduct training for community people, such as treatment supporters, care givers, community health workers, and traditional birth attendants				
3-2	To conduct training for clinical staff of health centers on HIV/ART management, including prevention and care for opportunistic infections				
3-3	To conduct training for staff of the health centers on commodity management				
3-4	To conduct regular supporting supervising visit to health centers and lay counselors by DHMTs				
3-5	To introduce ART/DOT for necessary PLWHAs				
4-1	To conduct training/ sensitization in TB/HIV co-infection management for clinical staff				
4-2	To conduct follow-up of defaulters for both TB and HIV treatment				
4-3	To strengthen DOT strategy for both TB and HIV				
4-4	To upgrade sputum smear examination of laboratory capacity and quality by quality assurance				

Narrative Summary	Objectively Verifiable Indicators <sup>2</sup>	Means of Verification	Important Assumptions
<p>5-1 To ensure that national guidelines for HIV and AIDS care are available and followed by DHMTs</p> <p>5-2 To improve communication, referral, and transportation systems among health facilities</p> <p>5-3 To conduct training for DHMT staff to improve necessary management skills for strengthening HIV and AIDS care services, such as performance assessment, monitoring and evaluation, District Integrated Logistic Assessment Tool, and technical support</p> <p>5-4 To develop HIV/ART/TB planning system</p> <p>5-5 To conduct experience sharing meetings between pilot districts</p> <p>6-1 To conduct baseline, follow-up, and end-line surveys for OR</p> <p>6-2 To plan and implement OR in collaboration with concerned organizations</p> <p>6-3 To monitor and evaluate the progress and findings of OR</p> <p>7-1 To conduct Taskforce Meeting quarterly</p> <p>7-2 To conduct periodical sharing workshop bi-annually</p>			<p>Pre-conditions</p> <p>1 Project concept, and roles and responsibilities of project stakeholders are shared and clearly understood among them</p>

\*1 Estimated Adult Positive Population in 2005 includes only the population from which the Zambia Demographic Health Survey derived the prevalence rate - men (15-59) and women (15-49)

\*2 Indicators must be quantified within a month after the commencement of the Project

\*3 HIV and AIDS services include counseling (including prevention and social support), testing for ART eligibility by CD4 counting/immunology/ bio-chemistry/ x-ray, and prevention and care of opportunistic infections for both ART eligible and non-eligible PLWHAs, and ART services for ART eligible PLWHAs

\*4 Lay counselors are defined as community people, such as community workers and volunteers, who don't have professional medical background

Abbreviation:  
 ART: Anti-Retroviral Treatment, ARV: Anti-Retroviral, DHMT: District Health Management Team (including District Health Offices, District Hospitals, and Health Centers), DOT: Directly Observed Treatment, OR: Operational Research, PLWHA: Person Living With HIV/AIDS



## PDM(Project Design Matrix)

Project Name : Integrated HIV and AIDS Care Implementation Project at District Level  
 Target Groups : ① PLWHAs (Estimated 29,000 persons) ② DHMTs at district level (About 300 professional staff)  
 Target Area : Chongwe and Mumbwa Districts

Project Period : April 2006- March 2009 (3years)

Date : 11 December,

Version 2

Narrative Summary	Objectively Verifiable Indicators	Chongwe	Mumbwa	Means of Verification	Important
<b>Overall Goal</b> Interventions to improve the HIV and AIDS care services for PLWHAs demonstrated at target districts are introduced in other districts.	Number and contents of interventions introduced in other districts	N/A	N/A	1 Record of Ministry of Health and National HIV/AIDS/STI/TB Council	
<b>Project Purpose</b> HIV and AIDS care services are improved and accessible at target districts.	1 Cumulative number of HIV positive case detected by VCT/PMTCT	4,000	7,000	1 VCT/PMTCT Register	1 HIV/AIDS policy of the Government of Zambia, including free provision of ARV drugs, does not change significantly
	2 Cumulative number of ART clients	2,300	3,500	2 ART Register	
	3 Percentage of defaulters within 6 months among ART clients	Less than 10%	Less than 10%	3 ART Register	
<b>Outputs</b> 1 Access to HIV counseling and testing is improved.	1-1 Number of health facilities providing VCT service	29	29	1-1 Record of DHMT	1 Necessary amount of ARV drugs is available at target districts  2 Concerned non-governmental organizations, including mission hospitals, at districts are cooperative to HIV/AIDS related activities of DHMT  3 The political, economic, and social situation is not severely worsened than at the commencing time of the Project  4 Number of new infection is not increased rapidly
	1-2 Number of health facilities providing PMTCT service	29	29	1-2 Record of DHMT	
	1-3 Number of health facilities providing DCT service	29	29	1-3 Record of DHMT	
	1-4 Number of health facilities applying Finger Pricking HIV testing method	29	29	1-4 Record of DHMT	
	1-5 Annual number of HIV counselling and testing in VCT	3,500	4,000	1-5 VCT/PMTCT registration	
	1-6 Annual number of HIV counselling and testing in PMTCT	4,000	5,000	1-6 VCT/PMTCT registration	
	1-7 Percentage of HIV tested among TB clinic	80%	80%	1-7 TB Register / PMCT register	
	1-8 Percentage of HIV tested among ANC clinic	80%	80%	1-8 TB Register / PMCT register	
2 Quality HIV care services are strengthened and scaled-up.	2-1 Number of health facilities providing ART services	10 plus 4 outreach sites	10	2-1 Record of DHMT	
	2-2 Number of health facilities which provide adherence counseling	20	20	2-2 Record of DHMT	
	2-3 Percentage of patients on ART who are screened by CD4 count testing for eligibility	80%	80%	2-3 ART register	
	2-4 TB Treatment Success(TB Cure) rate	85%	85%	2-5 TB Register	
	2-5 Percentage of HIV positive TB patients who undertook CD4 test	80%	80%	2-6 Operational Research data and others	
	2-6 Percentage of TB patients who are eligible and started ART	80%	80%	2-7 Operational Research data and	
3 DHMT's management capacities in HIV care services are enhanced.	3-1 Frequency of experience sharing meetings	Quarterly	Quarterly	3-1 Record of DHMT	
	3-2 ORs conducted and shared at central level	yes	yes	3-2 Record of DHMT	
4 Lessons learned by the Project are incorporated into national guideline on mobile ART services.	4-1 Lessons learned by the Project are reflected in the national guideline on mobile ART services.	yes	yes	4-1 National guideline on mobile ART services	
	4-2 Number of monthly regular meetings	12	12	4-2 Minutes of the meetings	
<b>Activities</b>	<b>Inputs</b>				
1-1 To identify and provide training for lay counselors	<b>Japanese Side</b> 1 Dispatch of experts (1) Long-term Expert (3 person) Health Administration/Infectious Disease Control, HIV/AIDS Care, Coordinator/Community Participation (2) Short-term Expert HIV/AIDS Care, OR, TB/HIV, IEC and others  2 Provision of equipment Necessary Laboratory Equipment, Necessary Office Equipment, Vehicles and others  3 Training of counterparts in Japan and third country (ies) About 1-3 persons/ year  4 Dispatch of study team when necessary  5 Allocation of operational costs for the Project			<b>Zambian Side</b> 1 Assignment of counterpart personnel at central and district level  2 Provision of land, spaces, and other necessary facilities at central and district level  3 Allocation of operational costs for the Project	
1-2 To train more professional counselors					
1-3 To promote Diagnostic Counselling and Testing (DCT), Prevention of Mother to Child Transmission(PMTCT) in health facilities such as TB,STI and Antenatal clinic				1 Frequent transfer of trained personnel at district level does not occur  2 Medical technology regarding HIV and AIDS services does not significantly change	
1-4 To introduce the Finger Pricking HIV testing in health centres					
2-1 To provide mobile ART services					
2-2 To conduct training for the health facility staff on HIV/OIs management					
2-3 To conduct training for community members such as adherence counselors in HIV/AIDS services					
2-4 To conduct regular supervisory visit to health facility by DHMTs					
2-5 To strengthen the health system at health facility level such as diagnostic capacity, transport, infrastructure, etc.					
2-6 To conduct training in TB and other OIs management for PLWHAs					
3-1 To conduct trainings for DHMT staff to improve necessary management skills for strengthening HIV care services					
3-2 To conduct quarterly meetings					
3-3 To conduct Operational Research					
4-1 To conduct monthly meetings at national level					
4-2 To compile the lessons learned, and conduct workshop to disseminate the lessons learned for their incorporation in national guidelines					
4-3 To participate in the working group for development of national guideline on mobile ART services					

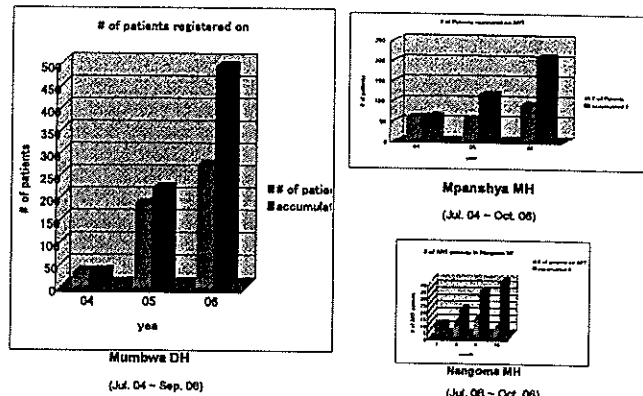
ARTIS trainings by DHMTs included



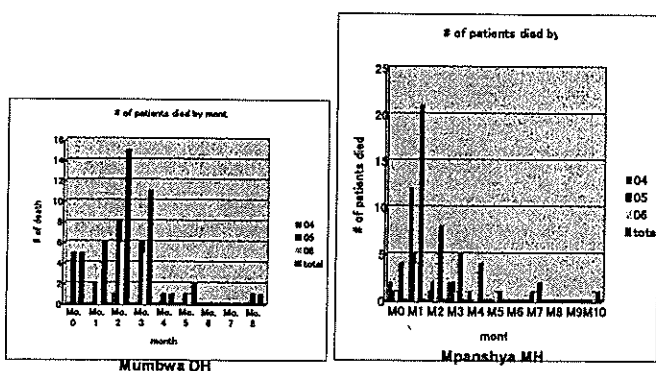
Present situation of ART service  
In Mumbwa & Chongwe district

JICA HIV/AIDS Care Project  
Tadeo Haysiawe  
Dec. '06

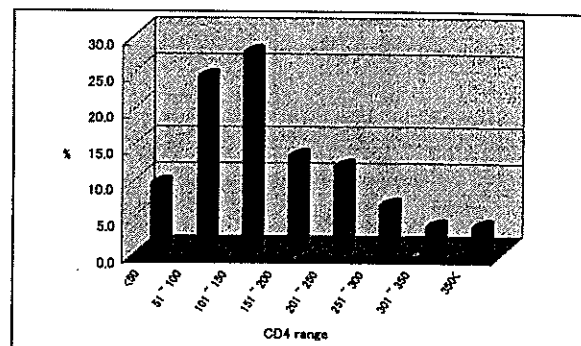
# of patients registered on ART



Death of patients registered on ART



Distribution of CD4 values  
among HIV+ patients  
who took eligibility test at Mumbwa DH



Mumbwa DH (May - Dec. 12, '06)  
Total: 414 HIV+ patients

Data comparison

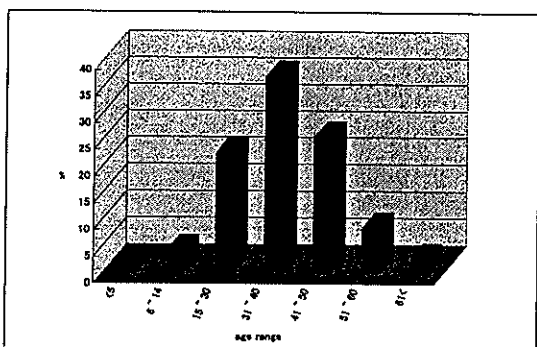
	Mumbwa District		Chongwe District	
	Mumbwe DH	Nangoma MH	Mpanshya MH	Chongwe ReHC
# of patients registered on ART (period)	493 (Jul. 04 - Sep. 06)	40 (Jul. 06 - Oct. 06)	208 (Jul. 04 - Oct. 06)	
death	57 (11.6 %)	NA	46 (22.1 %)	
defaulter	31 (6.3 %)	NA	17 (8.1 %)	

ART Service in Chongwe ReHC

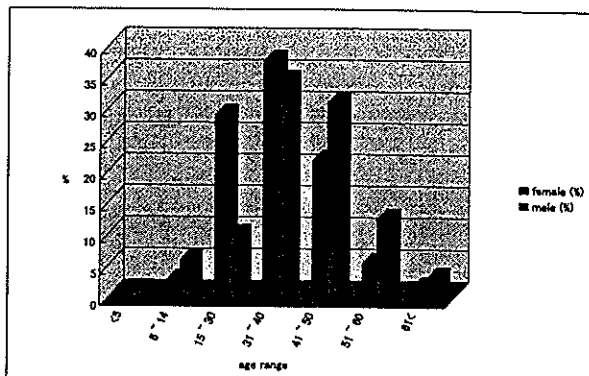
	Chongwe District
	Chongwe ReHC
# of patients registered on ART (Aug. 23 - Dec. 14, '06)	543(F:347, M196)
death	?
defaulter	?

\* CD4Z data

Age Distribution of ART patients in Chongwe ReHC



Age Distribution of ART patients by sex in Chongwe ReHC

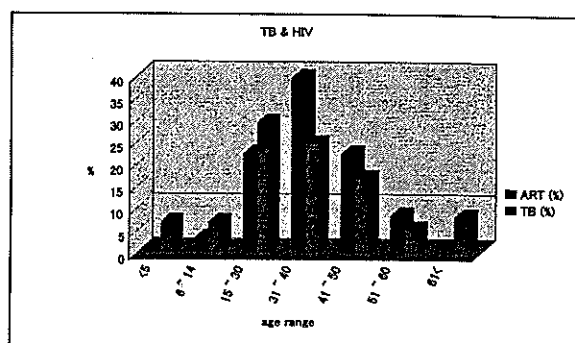


543 patients (F 347, M 196)

TB/HIV (from TB register) (Q3, '06)

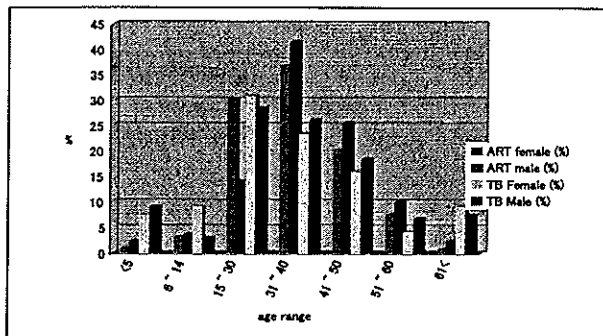
Category	Mumbwa District				Chongwe District			
	Nangoma MH	M120	Mumbwa DH	M130	Mpanzha MH	F40	50	RHC
EP	6(10%)	3(5%)	26(37%)	3(4%)	26(43%)	1(2%)	6(10%)	
P	31(50%)	1(2%)	60(86%)	1(1%)	37(60%)	1(2%)	46(76%)	
T	1(2%)	1(2%)	4(6%)	1(1%)	1(2%)	1(2%)	0	
I	3(5%)	1(2%)	7(10%)	1(1%)	20(33%)	1(2%)	1(2%)	
II	1(2%)	1(2%)	12(17%)	1(1%)	11(18%)	1(2%)	2(3%)	
III	0	0	0	0	0	0	0	
T	6	5	102	6	64	5	52	
TW HIV	+ 3(5%)	+ 2(3%)	+ 7(10%)	+ 1(1%)	+ 37(60%)	+ 1(2%)	+ 16(26%)	
DI + D	0	0	0	0	0	0	0	
(Year 4)					NA 21 (31%)		NA 29 (48%)	
SS +	1(2%)	1(2%)	21(30%)	1(1%)	17(28%)	1(2%)	17(28%)	
SS -	1(2%)	1(2%)	6(9%)	1(1%)	26(42%)	1(2%)	23(38%)	
dead	1	1	3	1	0	0	0	
TB	5	5	5	3	0	0	0	

Age distribution of ART & TB patients



ART: Mumbwa DH + Nangoma MH + Mpanzha MH (July '04 - Oct. '06) - 661 HIV patients  
 TB: Mumbwa DH + Nangoma MH + Mpanzha MH + Chongwe RHC (Q3, '06) - 250 TB patients  
 #: registered

Age distribution of ART & TB patients by sex



ART: Mumbwa DH + Nangoma MH + Mpanzha MH (July '04 - Oct. '06) - (F372, M289)  
 TB: Mumbwa DH + Nangoma MH + Mpanzha MH + Chongwe RHC (Q3, '06) - (F120, M130)  
 #: registered

Recording of ART register book

1	register book	Mumbwa District		Chongwe District	
		Mumbwa DH	Nangoma MH	Mpanzha MH	Chongwe RHC
	letters	governmental	original (CIA2)	governmental	original (CIDR2)
	consistency	sometimes difficult to read	readable	clear	clear
	consistency	inconsistent in writing addresses, etc. (The same addresses are written in different ways.)	relatively OK	relatively OK	relatively OK
2	recording	+ in address, dates, etc.	+ treatment start dates, etc.	+ registration numbers, etc.	
	double counting	+ Some patients were registered twice using different register numbers.			
	mistake	Patients' names, etc.	relatively OK	relatively OK	
3	information	relatively written well (remarks are used well)	no remarks, not enough information, existence of unnecessary columns	remarks not enough, no writing about defaulters	



**remarks**

- Must record the patients' information precisely on ART register book.
- Need to follow up about 310 HIV + patients who had been detected in Nangoma MH from Apr. '05 to Jun. '06.
- Must use the unified forms
- Further intensified supervision must be paid



## List of In-country Training

No	Title of Training	Training Period	Number of Trainees		Implementing Agency	Funding
			Chongwe	Mumbwa		
1	ARVs and OIs Management	-	5	-	CIDRZ	CIDRZ
2	PMTCT	-	22	-	CIDRZ	CIDRZ
3	ARVs and OIs Management	-	4	-	CIDRZ	CIDRZ
4	ARVs and OIs Management	27 Nov – 8 Dec 2006	8	8	Chainama College	JICA
5	Psychosocial Counseling Course	29 Jan – 23 Mar 2007	10	10	Chainama College	JICA
6	Finger Pricking (TOT) Course	06 Feb – 09 Feb 2007	10	12	Virology Laboratory, UTH	JICA
7	Psychosocial Counseling Course	12 Feb – 05 Apr 2007	10	10	Chainama College	JICA
8	Finger Pricking Course	19 Feb – 23 Feb 2007	10	10	Chainama College	JICA
9	Diagnostic Counselling & Testing	26 Feb – 02 Mar 2007	10	10	Dr. Kasoma (Provincial Health Office, Southern)/ Mr. Muvuma (DHMT, Chongwe)/ Ms. Lucy Zulu (MOH)/ Mr. Graham Samungobe (DHMT, Lusaka)	JICA
10	Facility Based Adherence Supporter	18 Jun – 22 Jun 2007	-	20	Kara Counselling	JICA
11	Diagnostic Counselling & Testing	30 Jul – 03 Aug 2007	-	10	Mr. Saul Banda (Ndola Central Hospital)/ Ms. Inambao Nalishebo (UTH)/ Mr. Dominic Phiri (DHMT, Monze)	JICA
12	PMTCT (phase 1)	19 Nov – 02 Dec 2007	-	18	-	Global Fund
13	PMTCT (phase 2)	03 Dec – 17 Dec 2007	-	21	-	Global Fund
14	Diagnostic Counselling & Testing	26 Dec – 29 Dec 2007	-	11	-	Global Fund
15	ARV and OIs Management	11 Feb – 22 Feb 2008	-	10	Chainama College	JICA
16	Psychosocial Counselling	18 Feb – 22 Feb 2008	-	5	Chainama College	JICA
17	Community Lay Counsellors in PMTCT	03 Mar – 07 Mar 2008	-	19	Kara Counselling	JICA
18	ARV and OIs Management	09 Jun – 20 Jun 2008	10	3	Chainama College	UNICEF
19	Community-based Adherence Counselling	14 Jul – 18 Jul 2008	24	24	Kara Counselling	UNICEF
20	Community-based Adherence Counselling	27 Jul – 02 Aug 2008	26	25	Kara Counselling	UNICEF
TOTAL			149	226		



## LIST OF OVERSEAS TRAINING

Japan

March, 2009

	Duration	Name	Position	Name of the Course	Training Institute	Contents of the Course
1	28 October - 16 November 2007	James SIMPUNGWE (Dr)	Director, Directorate of Clinical Care and Diagnostic Services, Ministry of Health	Group Training (CODE:J-06-00741) "Seminar for Health Policy Development" and Individual Counterpart Training	National Institute of Public Health, International Medical Center of Japan (IMCJ), Japan Foundation for AIDS Prevention (JFAP), Research Institute of Tuberculosis (RIT)	Group Training "Seminar for Health Policy Development", Visitation to IMCJ, JFAP and RIT Discussion of Joint Study in Zambia, TV Meeting (RIT, IMCJ ↔ JICA Zambia)
2	11 -31 May 2008	Christopher DUBE (Dr)	Mumbwa District Director of Health	HIV/AIDS Care/Community Health (Individual Counterpart Training)	International Medical Center of Japan (IMCJ), Ministry of Health, Labor and Welfare, Disease control section, Medical council of Tokyo, Taitou Health Center, Saku Health Center, Nagano Prefecture Health Office, Research Institute of Tuberculosis (RIT)	Situation of HIV/AIDS and HIV testing in Japan, Role of health center in urban setting, Community Health, Health system, Way of health service in rural area of Japan, Role of community health in rural setting in Japan, General information for community health in Nagano Prefecture, TB control in Japan, Latest treatment of HIV in Japan

## Thailand

1	13 -30 July 2006	Lawrence PHIRI (Dr)	ART Manager, Mumbwa District	Training of trainers on HIV/AIDS Care and ART Management	HIV/AIDS Regional Coordination Center, Asean Institute for Health Development, Mahidol University	ART Management Course (Training of Trainers)
2		Charles KAHIRA (Mr)	Manager of Planning & Development, Chongwe District			

## South Africa

1	7 -13 November 2007	Charles MSISKA (Dr)	Chongwe District Director of Health	38th Union World Conference on Lung Health	N/A	"Confronting the challenges of HIV and MDR in TB prevention and care"  Poster Session (Title: Improvement of TB-HIV service at rural health centers by mobile ART clinic)
2		Christopher DUBE (Dr)	Mumbwa District Director of Health			
3		Nangana KAYAMA (Mr)	TB/HIV Focal Person of Mumbwa District Health Management Team			

## Paris

1	16-20 October 2008	Charles MSISKA (Dr)	Chongwe District Director of Health	39th Union World Conference on Lung Health	N/A	"Global threats to lung health: the importance of health system responses"  Poster Session (Title: Assessment of improvement of TB/HIV care service in districts where the mobile Anti-Retroviral Treatment (ART) service has been introduced.)
2		Christopher DUBE (Dr)	Mumbwa District Director of Health			

## Senegal

1	3-7 December 2008	Charles MSISKA (Dr)	Chongwe District Director of Health	International Conference on HIV and STIs in Africa (ICASA)	N/A	Oral: (Title: ART expansion to rural health centre by mobile ART service in Mumbwa District, Central Province, Zambia)  Poster Session: (Title: Research on how ART clients can remind themselves of the time to take ARVs in Mumbwa District, Central Province, Zambia)
2		Christopher DUBE (Dr)	Mumbwa District Director of Health			



Schedule of expansion of ART services (by Mobile clinic) \_\_\_\_\_ District

	RHCs	starting time	necessary training	related staff	number	remarks
phase I						
phase II						
phase III						
phase IV						

