No.

# BASIC DESIGN STUDY REPORT ON THE PROJECT FOR INFECTIOUS DISEASE CONTROL PHASE III IN THE REPUBLIC OF ZAMBIA

October 2007

JAPAN INTERNATIONAL COOPERATION AGENCY



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#### Preface

In response to a request from the Government of the Republic of Zambia, the Government of Japan decided to conduct the Basic Design Study on the Project for Infectious Diseases Control Phase III in the Republic of Zambia and entrusted the study to the Japan International Cooperation Agency (JICA).

JICA sent to the Republic of Zambia a study team from February 26 to March 23, 2007.

The team held discussions with the officials concerned of the Government of the Republic of Zambia, and conducted a field study at the study area. After the team returned to Japan, further studies were made and the present report has been finalized.

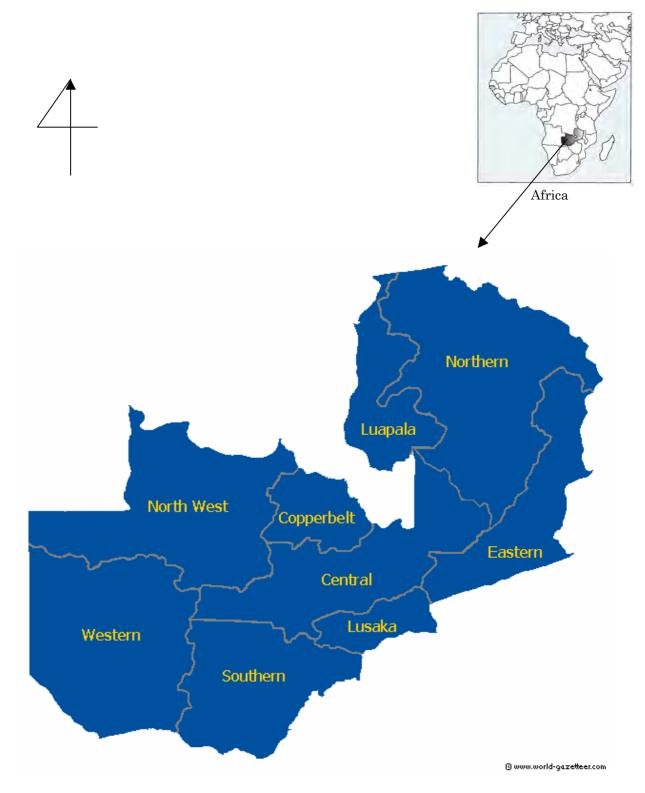
I hope that this report will contribute to the promotion of the Project and to the enhancement of friendly relations between our two countries.

I wish to express my sincere appreciation to the officials concerned of the Government of the Republic of Zambia for their close cooperation extended to the team.

October 2007

KUROKI Masafumi Vice-President Japan International Cooperation Agency

# Location Map



# Map of project site (Target area : throughout Zambia)

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#### Abbreviations

BP	British Pharmacopoeia
СЕ	Communaite Europeenne
CHAZ	Churches Health Association of Zambia
CIDA	Canadian International Development Agency
CIDRZ	The Centre for Infectious Disease Research in Zambia
DANIDA	Danish International Development Agency
DFID	Department for International Development
DHMT	District Health Management Team
DOTS	Direct Observed Treatment Short Course
DSBL	Drug Supply Budget Line
E/N	Exchange of Note
GDF	Global Drug Facility
GDP	Gross Domestic Product
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
GNI	Gross National Income
HIPC	Heavily Indebted Poor Countries
HIV	Human Immunodeficiency Virus
ISO	International Organization for Standardization
JIS	Japanese Industrial Standards
KNCV	Koninklijke Nedellandse Chemische Vereniging
M/D	Minutes of Discussions
MSL	Medical Stores Limited
PHC	Primary Health Care
RNE	Royal Netherland Embassy
SARS	Severe Acute Respiratory Syndrome
SIDA	Swedish International Development Cooperation Agency
UNICEF	United Nations Children's Fund
UNFPA	United Nations Population Fund
USAID	United States Agency for International Development
USP	US Pharmacopoeia
UTH	University Teaching Hospital
WB	World Bank
WHO	World Health Organization
ZAMBART	Zambia AIDS Related TB Organization
BP	British Pharmacopoeia
СЕ	Communaite Europeenne
CHAZ	Churches Health Association of Zambia
CIDA	Canadian International Development Agency
CIDRZ	The Centre for Infectious Disease Research in Zambia
DANIDA	Danish International Development Agency
DFID	Department for International Development

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#### Chapter 1 Background of the Project

#### 1-1 Background of the Request

Japan was the first among the G8 countries to make a commitment on the control of infectious diseases, announcing the "Okinawa Infectious Disease Initiative" at the Kyushu-Okinawa Summit in 2000, with a pledge of 3 billion dollars in total over the five-year period of 2000 to 2004. Japan has been implementing a wide range of measures against infectious diseases, and the initiative was to be used for diseases such as HIV/AIDS, tuberculosis, malaria, parasitic diseases, polio, SARS, and measles.

Due to budgetary constraints, the Government of Zambia was facing difficulty in procuring anti-tuberculosis drugs, tuberculosis test reagents, and health center kits, all of which were in urgent need. In response to the request of the Government of Zambia, Japanese assistance in the control of infectious diseases was provided in 2003 and 2004. Adult HIV prevalence in Zambia is high with approximately 16%, and a matter of concern is the prevalence of tuberculosis, an opportunistic infection, which is increasing with the spread of HIV/AIDS. As part of the country's fight against infectious diseases, the Government of Zambia formulated "the National HIV/AIDS/STI/TB Strategic Framework 2006-2010". In he Strategy, the target concerning HIV/AIDS is to ensure that 19% of the adult population takes the test by 2009, and the target concerning tuberculosis is to increase the uptake of Directly Observed Treatment, Short-Course (DOTS). Approximately 40% of the budget for procurement of drugs, materials and equipment depend on external assistance, and it is in difficulty procuring them by the country's budget. Therefore, the Government of Zambia placed the request to the Government of Japan in 2005 for the procurement of items needed to implement the strategy; testing materials and equipment for tuberculosis (11 items) and for HIV/AIDS (27 items), as well as the health center kits. The detail of the request is indicated in Table 1-1. However, the situation had changed during the 2 years that had passed between the submission of the request and the study. For example, some items had already been purchased. Therefore, as the result of the study and the discussions with the Ministry of Health, it was decided to purchase the health center kits only.

	Item	Unit	Quantity
TB Labo	ratory Supplies/Reagents		
1	Microscope Slides	pcs	4,600,000
2	Sputum Cups	pcs	4,600,000
3	Basic Fuchsine	g	70,000
4	Methylene Blue	g	75,000
5	Methylated Spirit	liter	2,475
6	Sulfuric Acid	liter	2,475
7	Phenol Crystals	kg	1,100
8	Xylene	liter	4,200
9	Immersion Oil	ml	420,000
10	Hydrochloric Acid	liter	250
11	Methanol	liter	1,125
HIV/AII	OS Laboratory Supplies/Reagents		
Dynabea	ads Equipment and Reagents		
1	Binocular Microscope	units	20
2	Voltex Mixer	units	20
3	Microcentrifuge	units	20
4	Micopipette (1,000µl)	units	20

**Table 1-1 Contents of the Request** 

5	Micropipette (200µl)	units	20
6	Haemocytometer	pcs	20
7	Dyna Magnet MPC-S	units	20
8	Dyna Mixer MX1	units	20
9	Dynabeads CD4	pcs	20
10	Dynabeads CD14	pcs	20
11	Lysing Solution	tests	10,000
12	Trypan Stain	Tests	10,000
13	Washing Buffer 1L	bottles	500
14	Bleach 1L	bottles	500
15	Ethanol 100% 1L	bottles	500
16	Pipette Tips	pcs	200,000
17	Micro Centrifuge Tubes	pcs	200,000
FACSCo	ount Reagents		
18	FACSCount	units	20
19	Reagents	Tests	40,000
20	Control Kit	Testsd	10,000
21	Sheath Buffer 20L	bottles	400
22	FACSClean 5L	bottles	400
23	FACSRinse 5L	bottles	400
24	Thermal Printer Paper	Rolls	1,600
HIV Raj	pid Diagnostic Test kits		
25	Determine	tests	120,000
26	Genie II	tests	24,000
27	Bionor	tests	40,000
Health (	Center Kit		
1	Health Center Kit	kits	7,180

#### **1-2** Natural Environment

The Republic of Zambia (hereinafter referred to as Zambia) is a land-locked country in southern Africa, surrounded by 8 countries; Tanzania, Malawi, Mozambique, Zimbabwe, Botswana, Namibia, Angola, Democratic Republic of the Congo. 11 million 500 thousand people (2004), less than tenth of the population of Japan, live in a land area of 752,612km<sup>2</sup>, double that of Japan. In the south, there is the Zambezi River with the total length of 2,750km, the world's largest fall known as the Victoria Falls, and the Lake Kariba, an artificial lake made for hydroelectric power generation. It has a tropical savanna climate, with annual rainfall varying from 600 to 1,400mm depending on the region. The northern region has more precipitation than the southern region. In general, the wet season is from November to April, and the dry season is from May to October. Being a land-locked country in high altitude, the majority of the country is 900 to 1,500m above sea-level, there is a large difference in temperature during day-time and night-time.

#### **1-3** Environment and Social Considerations

The content of a health center kit include materials and equipment, such as replacement blades for surgical knives, and disposable syringes/ needles, whose inappropriate waste disposal may have the risk of causing secondary infection. It was confirmed that in healthcare facilities in Zambia, these medical waste materials are stored in safety boxes and collected regularly for high-temperature incineration in every Provincial and District Hospitals. Therefore, there is no risk of the Project causing adverse effect to the Project site or the surrounding areas.

#### **Chapter 2 Contents of the Project**

#### 2-1 Basic Concept of the Project

#### 2-1-1 Overall Goal and Project Goals

The overall goals for this Project are the two priority issues of the Fifth National Development Plan 2006-2010: to reduce under five mortality rate, and to ensure reliable supply of essential drugs and medical materials and equipment. Through stable supply of health center kits containing therapeutic drugs for respiratory tract infections and diarrhea, the major causes of under five mortality, as well as other drugs for common infectious diseases in Zambia, the Project will support the strengthening of healthcare services in Zambia and contribute to the reduction of under five mortality rate and to the improvement of quality of life of people infected with HIV.

#### 2-1-1 The Project Overview

Of the total 18,000 heath center kits needed in 9 provinces for one year in 2009, the Project will supply 8,000 kits, the quantity for which there is no prospect of procurement.

#### 2-2 Basic Design of the Requested Japanese Assistance

#### 2-2-1 Design Policy

#### 2-2-1-1 Basic Principle

As described in the section"1-2 Background of the Request", changes have been made to the content of the request submitted in 2005, and items with higher priority and necessity have been re-selected for this Project, based on the study result and discussions with the Ministry of Health. The reasons for procuring only the health center kits, and removing test materials and equipment for tuberculosis and HIV/AIDS from the list are as follows.

[Health Center Kits For Fiscal Year 2009]

It has the highest priority out of the list of items requested by the Ministry of Health. The Government of Zambia have already procured a partial quantity of the health center kits needed for the two-year period of 2007 and 2008, making use of the basket fund and the budget of the Ministry of Health. The same is planned for the fiscal year 2009, however, it is anticipated that there will be a difficulty in procuring the total quantity of health center kits from the same financial resources.

[Tuberculosis Test Materials and Equipment: 11 Reagents For Fiscal Year 2008]

The Government of Zambia has an allocated budget of US\$ 1 million 360 thousand for tuberculosisrelated activities, from "The Global Fund to Fight AIDS, Tuberculosis and Malaria" ("the Global Fund"). As it was confirmed that the Ministry of Health had already submitted an application to the Global Fund for the procurement of these materials and equipment in question, they were removed from the list of items to be procured by this Project.

#### [HIV/AIDS Test Materials and Equipment: 27 Reagents For Fiscal Year 2008]

The Ministry of Health is currently reviewing the models of equipment, and given that the future policy was yet to be decided (at the time of this study), it was agreed to remove these materials and equipment from the list of items to be procured.

Moreover, many donors, including the World Bank, Centers for Disease Control and Prevention (CDC), Center for Infectious Disease Research in Zambia (CIDRZ) and Church Health Association of Zambia (CHAZ), are supporting the procurement of the requested materials, equipment and reagents. In order to avoid duplication of assistance, it was agreed to withdraw the request. Similarly, it was agreed to omit HIV Rapid Test Kits from the requested items for this Project, due to the fact that the provision of those kits are planned in a separate technical cooperation project.

#### 2-2-1-2 Natural Condition

In the plan for the control of primary and secondary infection, 4-month backup stock (the quantity secured to cover for the delay in next lot of delivery) had been purchased to be able to respond to the influence of wet season, or the delay in marine transport caused by climatic reasons. However, the Ministry of Health has procured the backup stock for 2007 and 2008, and plans to do so for 2009. Therefore, backup stock was not included in the procurement plan of this Project.

#### 2-2-1-3 Operation and Maintenance Capacity of the Implementing Organization

Adequate trainings have been conducted regarding the use of health center kits; therefore, problems regarding utilization and maintenance are not anticipated. Products with the same specification as the health center kits procured by the Government of Zambia will be procured, in order to avoid confusion on site.

#### 2-2-1-4 Grades of Equipment

The content of a health center kit is revised by the Ministry of Health and the donors every 2 years, based on morbidity trends and the consumption (or unused quantity) of drugs. Most recent revision was done in January 2007, and the next revision is planned in the beginning of 2009. The kits procured in this Project will be based on the list which was revised in January 2007. Table 2-1 shows the 56 items for the health center kits.

All of the listed drugs, except for a few items, are found in the WHO Model List of Essential Medicines (2007). When compared with the kits used in 9 countries from Africa and Asia, it was found that about half of the drugs were in common. The drugs and sanitary articles which were not in common were mainly for external injuries. Apart from external injury, which is the fourth most common reason to visit a health center, ophthalmic, otorhinolaryngologic, dermatologic and other infections are the major diseases in Zambia, and the content of the health center kit is adapted to such needs. All of the drugs are low-priced generic drugs.

Components	Form	Specification	Unit	Quantity
1 Acetylsalicylic acid (Aspirin) BP	tablet	300mg	1000 tabs.	
2 Erythromycin (as stearate) BP	tablet	250mg	500 tabs.	
3 Amoxycillin BP or USP	cap	250mg	1000 tabs.	4
4 Benzathine Benzylpenicillin BP	injection	2.4MIU	1 vial	20
5 Water for injection BP	injection	10ml	1 amp.	20
6 Benzyl Penicillin BP	injection	5MIU (3g)	1 vial	10
7 Benzyl Penicillin BP	injection	1MIU (600mg)	1 vial	10
8 Water for injection BP	injection	5ml	1 vial	50
9 Chlorpheniramine maleate BP	tablet	4mg	100 tabs.	
10 Diazapam BP	injection	5mg/ml	1 vial	
11 Ferrous sulphate BP, sugarcoated, red coloured	tablet	200mg	1000 tabs.	
12 Ferrous sulphate BP, sugarcoated	tablet	50mg	1000 tabs.	
13 Folic acid BP	tablet	5mg	1000 tabs.	
14 Clotrimazole 20g BP	cream	1%, 20g	1 tube	20
15 Hydrocortisone BP	ointment	1%, 15g	1 tube	20
16 Lidocaine Hydrochloride BP or USP	vilal	10ml/vial	1 vial	
17 Magnesium trisillicate co, BP	tablet		500 tabs.	
18 Methylergometrine maleate USP	amp.	0.2mg/ml	1 amp.	5
19 Metronidazole (scored) BP	tablet	200mg	1000 tabs.	· ·
20 Multivitamin BP, formula	tablet	20011ig	1000 tabs.	-
20 Multivitanin Br, formula 21 Nystain BP	suspension	100,000IU/ml, 30ml/vial	1000 tabs.	
22 ORS (WHO-formula), citrate BP, sachet	powder	20.5g/1L	1 viai 1 pac.	200
22 OKS (WHO-formula), citrate Br, sachet 23 Paracetamol (scored) BP	tablet	500mg	1000 tabs.	200
24 Mebendazole BP or USP	tablet		1000 tabs.	
		100mg	-	-
25 Paracetamol (scored) BP	tablet	100mg	1000 tabs.	
26 Phenoxymethylpenicillin Pottassium BP	tablet vial	250mg 3MIU, 10ml/vial	1000 tabs. 1 vial	20
27 Procaine Benzylpenicillin BP orUSP				
28 Salbutamol (scored) BP	tablet	2mg	1000 tabs.	28
29 Tetracycline USP, with 1.1 wide nozzle	Eye ointment	_	1 tube	26
30 Doxycycline Hydrate USP	tablet	100mg	1000 tabs. 100 tabs.	
31 Quinine Sulphate BP or USP 32 Nitrofurantoin BP	tablet	300mg	-	
	tablet	50mg	100 tabs.	-
33 Drug dispensing bag       34 Bandage BP		min. 64×83mm	1000 pcs.	50
		5cm×5m	1 roll	00
35 Braided silk suture (3/0) USP		"3/0" 22m	1 reel	
36 Braided silk suture (2/0) USP		"2/0" 22m	1 reel	-
37 Catgut chromic USP		75cm	1 reel	
38 Ballpoint pen	,	red, black and blue	1 pc.	
39 Cetrimide BP, sachets	powder	10g/1L	1 pc	
40 Chlorhexidine gluconate BP	solution	20%	1000 ml	1000
41 Condoms		180×52mm	1 pc.	1008
42 Cotton wool BP		500g	500 g	4
43 Gauze absorbent BP		4 fold, 0.90×5m	1 pc.	2
44 Gauze paraffin BP		10×10cm	36 pcs.	
45 Gloves	-	medium	100 pcs.	
46 Gloves	-	large	100 pcs.	
47 Needles, disposable 23G		0.65×32mm	100 pcs.	
48 Needles, disposable 21G		0.80×38mm	100 pcs.	
49 Note book pad		A5, lined, 100 leaves	1 pc.	
50 Strapping tape adhesive BP		7.5cm×5m	1 pc.	4
51 Scalpel surgical blade		No. 15	10 pcs.	
52 Swabs gauze		12 ply, 7.5×7.5cm	100 pcs.	
53 Syringe disposable		2ml	100 pcs.	
54 Syringe disposable		5ml	100 pcs.	
55 Toilet soap		90-100g	1 pc.	
56 Surgical gloves		size7.5	50 pcs.	:

#### Table 2-1 Content of Health Center Kits (56 Items)

#### 2-2-2 Basic Plan (Equipment Plan)

As described in the sections "1-1 Background of the Request" and "2-2-1-1 Basic Principle", only the health center kits will be procured for this Project.

Table 2-2 Equipment List and Usage				
Materials and Equipment	Requested Quantity	Revised Quantity		
Health Center Kit	7,180	8,000		

Table 2-2 Equipment List and Us	age
---------------------------------	-----

The Ministry of Health is requesting Japanese assistance for the procurement of 8,000 kits out of the total quantity needed for the fiscal year 2009, and has made the commitment to procure the remaining quantity from the budget of the Government of Zambia.

The quantity of kits needed for 2009 is estimated to be approximately the same as 2006; however, this quantity is uncertain because of various factors, such as the increased use of medical drugs that followed the introduction of free healthcare in 2006. In addition, the Government of Netherlands, who had been supplying the health center kits since 1990, had switched to providing assistance through the common basket fund and stopped the procurement of health center kits. From these reasons, there was a shortage of stock by October 2006, making determination of accurate quantity difficult. Nevertheless, by taking the quantity which was actually distributed from January to September 2006 (13,808 kits), the number of kits that would have been needed for the whole year can be estimated to be 18,411 kits (13,808/ 9 kits per month x 12 months).

Meanwhile, the common basket fund in Zambia is incorporated in the government budget, and the Ministry of Health has been purchasing 11,000 kits/per year from this fund. Thus, it can be assumed that the common basket fund and the budget of the Ministry of Health are available for the procurement of the health center kits for 2009 too, in the same quantity as the previous 2 years.

From such view point, and by calculating the number of kits needed for FY2009 as well as the quantity that can be purchased by the common basket fund and other budget, it was agreed that the requested 8,000 kits is an appropriate quantity to be purchased for this Project.

According to the manufacturer, 8,000 kits can be produced in 4 months. Given that the Medical Stores Limited (MSL) has sufficient capacity to store the health center kits, the kits procured in this Project will be delivered by one shipment.

#### 2-2-3 **Implementation Plan**

#### 2-2-3-1 **Implementation Policy**

The health center kits will be procured from a third country and the contract will be made with a Japanese firm by competitive bidding. Pre-shipment inspection will be consigned to a inspection agency, and on-site inspection will be performed by the consultant.

The implementing body of this Project is the Ministry of Health. MSL will be responsible for the activities between the central level and the District Health Management Team (DHMT) warehouse, and DHMT will be responsible for the activities from each DHMT warehouse to the health centers.

This Project will be implemented within the framework of Grant Aid from the Government of Japan, following the verification and the signing of Exchange of Notes by both governments. Implementation planning is done by a Japanese consultation firm after the signing, and the procurement of materials and equipment by the company chosen by tendering.

(1) Implementation Structure of the Recipient Country

The structure of the Zambian side is as follows:

Supervision: Ministry of Health

Implementation: MSL, DHMT

(2) Consultant

After the signing of Exchange of Note by both governments, the consultant of Japan will conclude a contract on consulting service with the Ministry of Health of Zambia, following the procedure of Japanese Grand Aid. The contract will be valid after the verification of the Government of Japan. The consultant will undertake the following responsibilities under the contract:

a) Preparation for bidding: Prepare the bidding documents, make final inspection of the specification

b) Bidding: Provide assistance in the selection of procurement company, and in procurement contract

c) Procurement: Check the documents for inspection of the products, and inspect the products upon delivery.

(3) Supplier

The suppliers of materials and equipment, who is selected by bidding, will conclude a contract with the Government of Zambia. The contract will be valid after obtaining verification of the Government of Japan. Under the contract, the supplier will procure, transport, and deliver the planned materials and equipment. The health center kits will be delivered to MSL in Lusaka, and the Ministry of Health will confirm the reception.

#### 2-2-3-2 Implementation Conditions

For a cost-effective procurement, cheaper generic drugs from a third country, such as India or China, will be considered in the same manner as procurement by UN and other donors. In this case, as it is important to ensure good product quality, the kits will be procured through the distributors, that comply to Good Distribution Practice (GDP), a management guideline established by EU for pharmaceutical wholesalers, and whose main focus of business are export to developing countries. These distributors have different expertise compared to normal pharmaceutical wholesalers, in that they have independent quality control standards, conduct screening of manufacturers, adopt appropriate packing and transportation methods, respond to claims and maintain long-term storage of samples.

Quality control procedures prior to shipment are done mainly in the following 3 stages:

- Manufacturer Pre-Qualification (PQ): Factory inspection by experts, documentary examination
- Product PQ: Documentary examination, quality analysis of samples
- Inspection of delivered products: Documentary examination, random sampling (as needed)

The contents of the health center kits for this Project, procured from around the world, are collected and

boxed at the packing factory of the distributor. The distributor will prepare the documents concerning quality control, check the content, submit them to the consultant and the Government of Zambia through a contractor (the contracted supplier), and deliver the goods. Furthermore, the distributor will provide substantive follow-up action after delivery, including provision of technical information and trouble-shooting, through the contracted suppliers.

#### 2-2-3-3 Scope of Works

Table 2-3 describes the responsibilities of both countries regarding procurement.

Work	Japan	Zambia		
Procurement of health center kits	0			
	0	0		
Transportation of health center kits	Transportation from the third	Transportation from MSL to		
	country to MSL in Lusaka.	Health Centers.		

Tabla	22	Seene	of V	Vorba
ladie	2-3	Scope	OI V	vorks

#### 2-2-3-4 Consultant Supervision

#### (1) Before Shipment

Pre-shipment inspection will be conducted at the packing factory of the distributor, in the presence of the procurement company. Pre-shipment inspection will be performed by a third-party agency, consigned by the consultant, and the details are as shown below. The consultant will not attend the inspection, and will only give instructions and check the result of inspection.

- a) Matching the equipment list of the contract and the shipment documents,
- b) Checking the delivery date,
- c) Checking the content, quantity and packing of the health center kits, and
- d) Confirmation of manufactured dates and expiration dates.
- (2) Delivery to MSL in Lusaka

Equipment inspection: The Ministry of Health, procurement company, and the consultant will check the quantity and damages.

#### 2-2-3-5 Quality Control Plan

In order to ensure good quality, products complying with various standards (differs for each item) will be procured. Pharmacopoeia (BP, USP etc), industry standards (JIS, ISO etc.), import regulation (USFDA, CE etc.) will be applied. With regard to pharmaceutical products, certificate of analysis for each production lot must be attached, compliance with relevant standards confirmed, and then shipped. Meanwhile, there is also a quality control system of the Zambian side, where inspection will be conducted after the delivery at MSL. The kits will be distributed to Health Centers after confirming the quality by performing their independent examination of samples.

#### 2-2-3-6 Procurement Plan

Country of origin of the health center kits will be as shown in Table 2-4.

Equipmont		Procurement		Remarks
Equipment	Local	Japan	Third Countries	Kelliarks
Health Center Kit			0	

**Table 2-4 Procurement of Health Center Kits** 

#### 2-2-3-7 Implementation Schedule

The health center kits will be delivered in one lot for this Project, and the schedule for procurement and distribution is as shown below.

Total schedule (from E/N to delivery)	: 13 months
From E/N to contract with suppliers	: 6 months
Delivery (from contract with supplier to delivery)	: 7 months

#### 2-3 Obligations of Recipient Country

For Grant Aid of the Government of Japan, the obligations of the Zambian side will be as follows:

- 1) Banking Arrangement (B/A)
- 2) Customs clearance and inspection of procured materials and equipment.
- 3) Ensure smooth implementation of the Project, by securing the budget and personnel for the storage of health center kits at MSL in Lusaka and for the transportation from MSL to DHMT warehouses and from DHMT to each Health Centers.
- 4) Submit reports on the reception, distribution, evaluation and monitoring of the materials and equipment, by using the format attached to the Minutes of Discussion (M/D).
- 5) To exempt the Japanese or third-country nationals, from customs duties and internal taxes that may be imposed with respect to the products and services under the verified contract.
- 6) To accord Japanese or third-country nationals whose services may be required in connection with the Project, such facilities as may be necessary for their entry into the Recipient Country and stay therein for the performance of their work.

#### 2-4 Project Operation Plan

In terms of operation and maintenance, the responsibility of by the Recipient Country will be the storage and distribution of the procured health center kits, and the related expenses.

#### a) Storage and Distribution Costs

For the health center kits delivered from MSL to DHMT, the cost for storage and transportation will be covered by the government budget (98% of MSL's budget is from the Ministry of Finance, the

remaining 2% is from the Ministry of Health). At MSL, the costs incurred in the past 3 years for the storage management, fuel and personnel are shown in Table 2-5. There is no record of vehicle repairs cost, but it is said that there has been expenditure whenever necessary. According to the responsible officer of MSL, there has never been insufficient budget.

(Unit : million ZMK)				
Fiscal Year	Storage Management	Fuel	Personnel	
2004	n.a.	343	259	
2005	10,274	477	249	
2006	n.a.	545	249	

Table 2-5 Storage, fuel, and personnel costs of MSL, in the past 3 years

Province	District	Amount	District	Amount
TTOVINCE	Kabwe	6,671	Chibombo	20,976
Central	Serenje	12,553	Mumbwa	13,420
contrar	Mkushi	9,682	Kapiri Mposhi	17,242
	Lusaka	53,245	Chongwe	10,131
Lusaka	Kafue	6,850	Luangwa	1,714
	Mazabuka	14,423	Kalomo	14,366
	Monze	13,013	Livingstone	2,823
	Choma	14,801	Namwala	7,630
Southern	Siavonga	4,847	Itezhi-tezhi	4,081
	Gewmbe	3,233	Kazungula	6,418
	Sinazongwe	6,996		-,
	Chililabombwe	2,823	Ndola	11,861
	Chingola	5,036	Luanshya	4,466
Coppervelt	Mufulira	3,981	Masaiti	8,799
	Kalulushi	3,103	Lufwanyama	6,59
	Kitwe	9,794	Mpongwe	5,748
	Mansa	15,774	Kawambwa	9,028
r ı	Samfya	15,560	Nchelenge	10,613
Luapula	Milengi	2,697	Chiengi	n.a
	Mwense	9,932	0	
	Kasama	13,973	Mpika	13,158
	Mungwi	11,134	Chilubi	6,64
Northern	Mbala	13,869	Luwingu	7,360
Northern	Nakonde	6,620	Mporokoso	7,086
	Isoka	9,275	Mpulungu	6,532
	Chinsali	12,276	Kapula	8,479
	Chipata	30,265	Chadiza	8,957
Eastern	Lundazi	24,998	Katete	18,220
Lastern	Chama	8,1564	Petauke	24,708
	Mambwe	4,344	Nyimba	6,802
	Solwezi	18,644	Kabompo	7,112
North-Western	Kasempa	4,939	Zambezi	6,320
North Western	Mufumbwe	4,334	Chavuma	3,031
	Mwinilunga	11,685		
	Mongu	13,295	Shangombo	7,720
Western	Kaoma	15,297	Kalabo	10,982
110000111	Sesheke	6,964	Lukulu	6,758
	Senanga	10,328	1	

#### Table 2-6 Operation Cost of Each DHMT in 2005

Source : MSL

#### b) Implementation Structure for Storage and Distribution

Given that the Ministry of Health will take charge of transporting the health center kits procured in this Project, from MSL to every DHMT, the place of transfer will be at MSL in Lusaka.

MSL has a storage capacity of 4,133m<sup>3</sup>. It was being renovated when the study team visited the warehouse (March 2007), but it will be able to store the medical drugs under controlled temperature once completed. With respect to health care kits, the warehouse has the capacity of storing about 10,000 kits in one bulk, thus allowing the storage of the totality of kits which will be procured, i.e. 8,000 kits. According to the responsible officer of MSL, all DHMT warehouses are in good condition and have never had any serious problems, such as rainwater leakage, that might jeopardize the quality of stored medical drugs.

MSL has 12 ten-ton trucks supplied by the Government of Ireland and UNICEF, 20 drivers and 2 mechanics. The kits, together with other medical equipment, drugs and test reagents, are distributed every month from MSL to DHMT warehouses and from DHMT warehouses to Health Centers, according to the annual schedule (Photograph 12). About 1,200 Health Centers are established across the country. A clinical officer or a nurse is in charge of each health center, maintaining an inventory card for stock control by item; therefore, it can be said that the kits are appropriately managed and used.

Table 2-7 shows the types and the total numbers of vehicles possessed by the Ministry of Health, 7 Provincial Health Office, 54 DHMT, 6 Hospitals (75% of the whole country), as of 2002. (Data of DHMT only was not available)<sub> $\circ$ </sub> It suggests that there is an average of about 14.1 vehicles per organization. If a vehicle breaks down, privately owned vehicles are hired as needed, to distribute the kits etc. to the Health Centers. The expenses are covered by the operational budget of DHMT, and no particular problem has arisen so far. Furthermore, some DHMT were distributing materials and equipment on any vehicle in use, whether it was a car transporting personnel or an ambulance, if the destinations were the same, in order to save the cost of fuel.

Types	Number	Proportion (%)
Four-wheel drive	425	44.3
Pick-up car	159	16.6
Sedan	110	11.5
Ambulance	103	10.8
Minibus	72	7.5
Truck	60	6.3
Bus	19	2.0
Others	10	1.0
Total	958	100.0

Table 2-7 Types / Numbers of Vehicles Possessed by the Ministry of Health

Source : The Ministry of Health

Therefore, it is confirmed that the necessary personnel and budget for storage and distribution are secured and the organizational structure established, hence no particular problems are anticipated with regard to the management and maintenance of the materials and equipment procured in this Project.

#### 2-5 Project Cost Estimation

#### 2-5-1 Initial Cost Estimation

The total cost for the implementation of this Project is estimated to be 345 million Japanese yen. Based on

the scope of works indicated in Table 3-3, the costs to be borne by the Government of Japan and the Government of Zambia are estimated to be as shown below.

(1) Estimated Project Cost to be Borne by the Government of Japan

Item	Cost (in million yen)
Equipment	327
Working design/ procurement supervision	18
Total	345

**Table 2-8 Cost Estimation** 

This cost estimate is provisional and does not immediately equal to the limit of the financial assistance of E/N.

(2) Estimated Project Cost to be Borne by the Government of Zambia

	(Unit : million ZMK)		
Item	Cost		
Storage / Distribution	11,741		
Commissions base on Banking Arrangement (B/A)	13		
Total	11,754		

#### Table 2-9 Cost Estimation (Zambia)

#### 2-5-2 Operation and Maintenance Cost

For this Project, the cost of storage and distribution to be borne by the Government of Zambia is estimated to be 11 billion 741 million Zambian Kwacha (DHMT 741 million and Central Medical Store 11 billion Zambian Kwacha). Until now, the storage and transportation of health center kits have been implemented by the Zambian side without any problem. The quantity of kits to be purchased in this Project is within the usual volume of procurement and no additional expenses are foreseen; therefore, no particular difficulties are expected in terms of operation and maintenance.

#### 2-6 Other Relevant Issues

The Project's implementation structure, distribution costs, staff and vehicle arrangements have been confirmed and there are no problems to be anticipated. However, for previous projects on the control of primary and secondary infections, the achievements had never been appropriately reported and they were only clarified by the study team of this Project. Based on this experience, the importance of monitoring and evaluation has been mentioned in the E/N for this Project, with a reporting format attached. The operation and management of the Project will be followed-up using this report of the Project.

#### Chapter 3 Project Evaluation and Recommendations

#### 3-1 Project Effect

(1) Direct Effect

- a) Through the implementation of this Project, the health center kits needed for the fiscal year 2009 will be distributed throughout the country, in appropriate quantity and stable supply.
- b) 10.5 million citizens of Zambia will be able to obtain appropriate treatment when infected with common infectious diseases.

#### (2) Indirect Effect

- a) Treatment of common infectious diseases is expected to improve infant development.
- b) Treatment of common infectious diseases is expected to strengthen the labor force and productivity.

#### **3-2** Recommendations

In Zambia, the share of external assistance in the budget for medical supplies and equipment is decreasing every year, and self-reliance efforts can be observed. With regard to health center kits, donor's assistance in the form of direct procurement has been replaced by common basket fund, and the procurement by the Government of Zambia has started in 2007. However, the situation is still unstable and a request for partial procurement for the fiscal year 2009 was submitted to the Government of Japan. A formulation of progressive self-procurement plan is recommended to move towards independence after 2010.

# Appendices

# 1 Member List of the Survey Team

(1) Eiji Inui	Team Leader	JICA Zambia Office
(2) Minako Kuramitsu	Project Coordinator	JICA Grant Aid Management Dept.
(3) Toshimi Sato	Equipment Planner	Japan International Cooperation Systems
(4) Keiko Kobayashi	Procurement Planner	Japan International Cooperation Systems

# 2 Survey Schedule

No	Date	9	Assignment	Stay
1	25-Feb	Sun	Tokyo→	
2	26-Feb	Mon	Lusaka JICA Offoce	Lusaka
3	27-Feb	Tue	08:30 Embassy of Japan 14:30   JSI Deliver	Lusaka
4	28-Feb	Wed	11:00 MoH PS, Pharmaceuticals 15:00 MoH Procurement	Lusaka
5	1-Mar	Thu	08:30 Lusaka→Ndola 14:00 DHO 15:30 Ndola Central Hospital	Ndola
6	2-Mar	Fri	09:30 Ndola DHMT 11:00 Lubuto Clinic 15:30 TDRC	Ndola
7	3-Mar	Sat	08:30 Ndola→Lusaka	Lusaka
8	4-Mar	Sun		Lusaka
9	5-Mar	Mon	09:30 MoH-Laboratory 10:00 Embassy of Netherland 11:30 WHO 12:30 DFID 14:30 CIDA 15:30 MoH-DSBL	Lusaka
10	6-Mar	Tue	09:30 MSL 11:00 JICA 14:00 Thoracic Disease Lab.	Lusaka
11	7-Mar	Wed	08:00 MoH-TB Specialist 14:00 USAID/ZPCT 14:30 MoH-Pharmaceutical Specialist	Lusaka
12	8-Mar	Thu	07:00 Lusaka→Livingstone 08:00 Kafue Hospital	Livingstone
13	9-Mar	Fri	09:30 Southern Province Health Office 10:00 District Hospital 11:00 DHMT	Livingstone
14	10-Mar	Sat	08:30 Livingstone→Lusaka	Lusaka
15	11-Mar	Sun		Lusaka
			Coordinator: Lv. Tokyo→	
16	12-Mar	Mon	Public Holiday	— Lusaka
17	13-Mar	Tue	Coodinator: →Arr. Lusaka 10:00 JICA 14:30 MoH-Procurent 15:00 MoH-TB Officer	Lusaka
18	14-Mar	Wed	09:00 Lusaka DHMT 11:00 Kalilangalinga CIDRZ 14:00 JSI Deliver 15:00 MoH-Laboratory	Lusaka
19	15-Mar	Thu	08:00 Discussion on Minutes with MOH 14:00 Lusaka DHMT	Lusaka
20	16-Mar	Fri	08:30 Minutes preparation 11:30 Discussion with MoH 14:30 MoH Procurement/Supplies	Lusaka
21	17-Mar	Sat		Lusaka
22	18-Mar	Sun		Lusaka
23	19-Mar	Mon	8:30 MoH-TB 11:00Signing on Minutes 16:00 Embassy of Japan	Lusaka
24	20-Mar	Tue	Supplementary survey at MoH Coordinator: Leaving Lusaka→	Lusaka
25	21-Mar	Wed	Supplementary survey at MSL Coodinator: →Arr. Tokyo	Lusaka
26	22-Mar	Thu	11:00 JICA Supplementary survey at MSL	Lusaka
27	23-Mar	Fri	Leaving Lusaka→	
28	24-Mar	Sat	→Tokyo	

# 3 List of Parties Concerned in the Recipient Country

(1)	Embassy of Japan	Mr. Takahito Katayama	Second Secretary
(2)	JICA Zambia office	Mr. Taro Kikuchi	Assistant Resident Representative
.,		Ms. Tomoko Z. SICHONE	JICA Expert
(3)	Ministry of Health	Dr. Simon MITI	Permanent Secretary
( )	,	Mr. Nicolas CHICUENIYA	Donor Coordinator
		Dr. James SIMPUNGWE	Director Clinical care/ Diagnostic Services
		Dr. Victor MUKONKA	Director Public health and Research
		Dr. FUNDAFUNDA	DSBL Manager
		Mr. Thomas LIENJE	Head Procurement & Supplies
		Mr. Lupupa	Chief Purchasing & Supplies
		Mr. Friday MUMBA	Senior Purchasing & Supplies
		Dr. Nathan KAPATA	TB Specialist
		Ms. ZULU	TB & Leprosy
		Ms. Fales MWAMBA	Laboratory Specialist (HIV/AIDS)
		Ms. Caroline Yeta	Pharmaceuticals specialist
		Ms. Rosa Andala	Pharmaceuticals specialist
(4)	Lusaka DHMT	Mr.Graham SAMUNGOLE	TB Control Manager
		Ms. MULENGA	Pharmacist
(5)	Kafue District Hospital	Mr. Mwilinga A. K.	Laboratory Technician
(6)	Chilenje UHC	Mr. Larry WERTERMAN	Laboratory Director
		Ms. A. Faifai KULULA	Pharm. Engineer
(7)	Copperbelt Provincial Health Office	Dr. Chandwa NG'AMBI	Director
(8)	Ndola DHMT	Dr. Robert HANTENDA	Manager
		Mr. Chomba CHIMOLULA	Laboratory Technician
(9)	Ndola Central Hospital	Dr. Charles MASESE	Chief Clinical Service
		Mr. NYONI	Medical Bioscientist
	TDRC Ndola	Mr. Bobby MALILWE	Deputy Director Microbiology
(10)	Luboto Clinic, Ndola	Mr. SILUYELE	Deputy Director
		Mr. Davies SIAME	Laboratory Technician
(11)	Southern Province Health Office	Dr. SYAKANTU	Director
(12)	Livingstone DHMT	Dr. CHINYONGA	Director
		Ms. Clara HADUNKA	Coodinator, TB& Leprosy
		Mr. N. HANDIMA	Team Leader, ZAMBART
(13)	Livingstone Hospital	Dr. PHIRI	Director
		Mr. Boniface KABUMGO	Medical Bioscientist, laboratory
		Mr. Humphrey MWAPE	Laboratory Technician
		Mr. MAVU	Pharmacist
		Mr. Moomba	Pharmacist

(14)	Lung Diseases Research Center	Mr. MWEENBA	Scientist
		Ms. Joyce CHILOMGO	Laboratory Technician
		Ms. Grace MWIKUMA	Laboratory Scientist
(15)	MSL	Mr. David THOMPSON	Managing Director
		Mr. Tom BROWN	Director, Logistics
		Mr. Davy SIMONGA	Quality Control Manager
		Mr. Abel PHIRI	Manager, Transport
(16)	WHO	Dr. Peter SONGLO	Diseases Prevention Management & Planning
		Dr. M. MABOSHE	TB Control
		Dr. Sansan MYINT	HIV Officer
(17)	CIDA	Ms. Alison NABUBWERE	Health Development
(18)	DFID	Ms. Jane MILER	Health-HIV/AIDS
(19)	RNE	Mr. Peter De HAAN	First Secretary
(20)	JSI Deliver (USAID)	Mr. Walter PROPER	Director
		Mr. Chama CHISALA	Laboratory & Logistics Advusor
(21)	ZPCT (USAID)	Ms. C. THOMPSON	Representative
		Dr. Kwasi TORPEY	Director
		Ms. Cail BRYAN	Senior Advisor (Pharmaceuticals)
		Ms. Prisca KASONDE	Senior Advisor (HIV)

#### MINUTES OF DISCUSSIONS ON THE BASIC DESIGN STUDY ON THE PROJECT FOR INFECTIOUS DISEASE CONTROL PHASE III IN THE REPUBLIC OF ZAMBIA

In response to a request from the Government of the Republic of Zambia (hereinafter referred to as "Zambia"), the Government of Japan decided to conduct a Basic Design Study on the Project for Infectious Control Phase III (hereinafter referred to as "the Project") and entrusted the study to the Japan International Cooperation Agency (hereinafter referred to as "JICA").

JICA sent to Zambia the Basic Design Study Team (hereinafter referred to as "the Team"), which is headed by Mr. Eiji Inui, Resident Representative, JICA Zambia Office, and conducted the study from February 26<sup>th</sup> to March 23<sup>rd</sup>, 2007.

The Team held discussions with the officials concerned of Zambia and conducted field surveys at some of the target areas of the Project.

In the course of the discussions and the field surveys, both parties confirmed main items described on attached sheets. The Team will proceed to prepare the Basic Design Study Report.

Lusaka, March 19th, 2007

Eiji Inui Leader Basic Design Study Team Japan International Cooperation Agency Japan

Dr. Simon K. Miti Permanent Secretary Ministry of Health Republic of Zambia

#### ATTACHMENT

1. Objective of the Project

The objective of the Project is to reduce morbidity and mortality caused by infectious diseases in Zambia through procurement of Health Center Kit.

2. Project sites

The Project Sites are health centers throughout Zambia.

- 3. Responsible and Implementing Agency The responsible agency and the implementing agency are the Ministry of Health.
- 4. Item requested by Zambia
- 4-1. After discussions with the Team, items described in ANNEX-1 were finally requested by the Government of Zambia.
- 4-2. The final item and its quantity to be included in the Project will be decided after further analysis in Japan. JICA will assess appropriateness of the request and will recommend to the Government of Japan for approval.
- 5. Japan's Grant Aid Scheme
- 5-1. The Government of Zambia understands Japan's Grant Aid Scheme explained by the Team, as described in ANNEX-2.
- 5-2. The Government of Zambia will take necessary measures, as described in ANNEX-3, for smooth implementation of the Project, as a condition for Japan's Grant Aid to be implemented.
- 6. Schedule of the Study

After detailed examination of the study results, JICA will complete a final report on the Project and send it to the Ministry of Health of Zambia around October, 2007.

7. Other relevant issues

#### 7-1. Requested Amount of Health Center Kits

The Ministry of Health of Zambia explained that the scale-up of user fee removal policy in 2006 as well as introduction of Health Center Kits to urban health centers have increased the consumption rate of Health Center Kits by 50%; therefore requesting 11,000 kits for the year 2009 which is approximately 50% more than the amount requested in Phase I and Phase II Projects respectively. The Ministry of Health of Zambia explained that the rest of the required amount of Health Center Kits for year 2009 will be procured by the Zambian side.

# 7-2. Components of Health Center Kit

The Ministry of Health of Zambia explained that the next review of the components of the Health Center Kit will be conducted early 2009, therefore the components of Health Center Kit for year 2009 will remain unchanged from the list attached in ANNEX-1.

#### 7-3. Distribution

Both sides agreed that the Health Center Kits procured under the Project will be distributed as follows:

The Government of Japan will deliver to Medical Stores Limited (hereinafter referred to as MSL) in Lusaka. Afterwards, MSL will deliver to District Health Management Teams (hereinafter referred to as, DHMTs), then DHMTs will deliver to health centers.

#### 7-4. Budget for Storage and Distribution

The Ministry of Health of Zambia will take necessary measures for prompt and appropriate distribution of the Health Center Kits. In order to do so, the Ministry of Health of Zambia will secure and allocate necessary budget and human resources for distribution and storage.

#### 7-5. Survey Result of Phase I and II of the Project

The Team expressed their concern that Pyrazinamide, Sputum Containers, and Microscopic Slides that were procured in Phase I and II are still being stocked in the warehouses of MSL and DHMTs, and that Pyrazinamide will expire on October 2007. The Ministry of Health of Zambia explained as follows. Regarding Sputum Containers and Microscopic Slides, the consumption has been reduced because of lessened capacity in the laboratories in the district and provincial hospitals. With the current building of capacity of the laboratories in level 1 and level 2 facilities, these commodities will be consumed. As regards to Pyrazinamide, the government of Zambia has changed the policy of tuberculosis drugs and is currently using a combination tablet. This combination tablet has been found very good for adherence. However, single formulations are still useful for cases of resistance and reactions, but the consumption of these drugs has tremendously lessened. Hence the stock-up of Pyrazinamide at MSL. The Ministry of Health of Zambia explained that best efforts will be made for the use of these stocked drugs and commodities.

#### 7-6. Monitoring and Evaluation

The Team stressed the importance of monitoring and evaluation of the Project. The Ministry of Health of Zambia agreed to submit the monitoring and evaluation reports as attached in Annex-4 to JICA Zambia office.

#### 7-7. Custom Clearance

The Government of Zambia will ensure prompt execution of the unloading and customs clearance of the equipment procured under the Project at the port of disembarkation and bear all necessary expenses.

#### 7-8. Tax Exemption

The Government of Zambia shall take necessary measures to exempt Japanese nationals who will be engaged in the Project from all duties and related fiscal charges which may be imposed in Zambia with respect to the import and local procurement of equipment and services supplied under the verified contract.

#### ANNEX 1 Items Finally Requested for the Project

ANNEX 2 Japan's Grant Aid scheme

ANNEX 3 Major Undertakings to be taken by Each Government

ANNEX 4 Monitoring sheets for the Project

# ANNEX 1

# Items finally requested by the Government of Zambia for year 2009

	No.	Item	Quantity
ĺ	1	Health Centre Kit	11,000

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#### Components of the Helth Center Kit

Components	Form	Specification	Unit	Quantity
I Acetylsalicylic acid (Aspirin) BP	tablet	1300mg	1000 tabs.	
2 Erythromycin (as stearate) BP	tablet	250mg	500 tabs.	
3 Amoxycillin BP or USP	ćap	250mg	1000 tabs.	
4 Benzathine Benzylpenicillin BP	injection	(2.4MTU	l vial	2
5 Water for injection BP	injection	10ml	1 amp.	2
6 Bénzyl Penicillin BP	injection	5MIU (3g)	l vial	1
7 Benzyl Penicillin BP	injection	1MIU (600mg)	1 vial	1
8 Water for injection BP	injection	5ml	l vial	5
9 Chlorpheniramine maleate BP	tablet	4mg	100 tabs.	
10 Diazapam BP	injection	5mg/ml	l vial	
11 Ferrous sulphate BP, sugarcoated, red coloured	tablet	200mg	1000 tabs,	
12 Ferrous sulphate BP, sugarcoated		50mg	1000 tabs.	<u> </u>
13 Folic acid BP	tablet	5mg	1000 tabs.	
14 Clotrimazole 20g BP	cream	1%, 20g	l tube	2
15 Hydrocortisone BP	ointment	1%, 15g	1 tube	
16 Lidocaine Hydrochloride BP or USP	vilal	10ml/vial	1 vial	
17 Magnesium trisillicate co, BP	tablet		500 tabs.	
18 Methylergometrine maleate USP	amp.	0.2mg/ml	1 amp.	
19 Metronidazole (scored) BP	tablet	200mg	1000 tabs.	
20 Multivitamin BP, formula	tablet	1200mg	1000 tabs.	
21 Nystain BP	suspension	100,000TU/ml, 30ml/vial	l vial	
22 ORS (WHO formula), citrate BP, sachet	powder	20.5g/1L	l pac.	20
23 Paracetamol (scored) BP	tablet	[500mg	1000 tabs.	
24 Mebendazole BP or USP	tablet	100mg	100 tabs.	
25 Paracetamol (scored) BP	τablet	100mg	1000 tabs.	
26 Phenoxymethylpenicillin Pottassium BP	tablet	250mg	1000 tabs.	
27 Procaine Benzylpenicillin BP orUSP	vial	3MIU, 10ml/vial	l vial	2
26 Salbutamol (scored) BP	tablet	2mg	1000 tabs.	
29 Tetracycline USP, with 1.1 wide nozzle	Eye ointment	1%, 5g/tube	l tube	2
30 Doxycycline Hydrate USP	tablet	100mg	1000 tabs.	
31 Quinine Sulphate BP or USP	tablet	j300mg	100 tabs.	•
32 Nitrofurantoin BP	tablet	50mg	100 tabs.	
33 Drug dispensing bag		min. 64×83mm	1000 pcs.	
34 Bandage BP		5cm×5m	1 roll	б
35 Braided silk suture (3/0) USP		"3/0" 22m	l reel	
36 Braided silk suture (2/0) USP		"2/0" 22m	<u>l</u> reel	
37 Catgut chromic USP		75cm	1 reel	
38 Ballpoint pen		red, black and blue	1 pc.	
39 Cetrimide BP, sachets	powder	10g/1L	l pc	
40 Chlorhexidine gluconate BP	solution	20%	1000 ml	
41 Condoms		180×52mm	1 pc.	100
42 Cotton wool BP		500g	500 g	
43 Gauze absorbent BP		4 fold, 0.90×5m	1 pc.	
44 Gauze paraffin BP		10×10cm	36 pcs.	
45 Gloves	_	medium	100 pcs.	
46 Gloves	·	large	100 pcs.	
47 Needles, disposable 23G		0.65×32mm	100 pcs.	
48 Needles, disposable 21G		10.80×38mm	100 pcs.	
49 Note book pad		A5, lined, 100 leaves	1 pc.	
<i>ā0</i> Strapping tape adhesive BP		7.5cm×5m	1 pc.	
		No. 15	10 pcs.	
		12 ply, 7.5×7.5cm	10 pcs.	
51 Scalpel surgical blade			A LUUTDES 1	
52 Swabs gauze				-
52 Swabs gauze 53 Syringe disposable		2ml	100 pcs.	
52 Swabs gauze				

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#### ANNEX 2 Japan's Grant Aid Scheme

#### 1. Grant Aid Procedure

1)

Japan's Grant Aid Program is executed through the following procedures.
Application (Request made by a recipient country)
Study (Basic Design Study conducted by JICA)
Appraisal & Approval (Appraisal by the Government of Japan and Approval by Cabinet)
Determination of (The Notes exchanged between the Governments of Japan and the recipient country)

2) Firstly, the application or request for a Grant Aid project submitted by a recipient country is examined by the Government of Japan (the Ministry of Foreign Affairs) to determine whether or not it is eligible for Grant Aid. If the request is deemed appropriate, the Government of Japan assigns JICA to conduct a study on the request. If necessary, JICA send a Preliminary Study Team to the recipient country to confirm the contents of the request.

Secondly, JICA conducts the study (Basic Design Study), using Japanese consulting firms.

Thirdly, the Government of Japan appraises the project to see whether or not it is suitable for Japan's Grant Aid Program, based on the Basic Design Study report prepared by JICA, and the results are then submitted to the Cabinet for approval.

Fourthly, the project, once approved by the Cabinet, becomes official with the Exchange of Notes signed by the Governments of Japan and the recipient country.

Finally, for the implementation of the project, JICA assists the recipient country in such matters as preparing tenders, contracts and so on.

2. Basic Design Study

#### 1) Contents of the Study

The aim of the Basic Design Study (hereinafter referred to as "the Study"), conducted by JICA on a requested project (hereinafter referred to as "the Project"), is to provide a basic document necessary for the appraisal of the Project by the Government of Japan. The contents of the Study are as follows:

- a) confirmation of the background, objectives and benefits of the Project and also institutional capacity of agencies concerned of the recipient country necessary for the Project's implementation;
- b) evaluation of the appropriateness of the Project to be implemented under the Grant Aid
   Scheme from the technical, social and economic points of view;
- c) confirmation of items agreed on by both parties concerning the basic concept of the Project;
- d) preparation of a basic design of the Project; and

e) estimation of costs of the Project.

The contents of the original request are not necessarily approved in their initial form as the contents of the Grant Aid project. The Basic Design of the Project is confirmed considering the guidelines of Japan's Grant Aid Scheme.

The Government of Japan requests the Government of the recipient country to take whatever measures are necessary to ensure its self-reliance in the implementation of the Project. Such measures must be guaranteed even through they may fall outside of the jurisdiction of the organization in the recipient country actually implementing the Project. Therefore, the implementation of the Project is confirmed by all relevant organizations of the recipient country through the Minutes of Discussions.

#### 2) Selection of Consultants

For the smooth implementation of the Study, JICA uses a consulting firm selected through its own procedure (competitive proposal). The selected firm participates the Study and prepares a report based upon the terms of reference set by JICA.

At the beginning of implementation after the Exchange of Notes, for the services of the Detailed Design of the Project, JICA recommends the same consulting firm which participated in the Study to the recipient country, in order to maintain the technical consistency between the Basic Design and Detailed Design as well as to avoid any undue delay caused by the selection of a new consulting firm.

3. Japan's Grant Aid Scheme

1) What is Grant Aid?

The Grant Aid Program provides a recipient country with non-reimbursable funds to procure the facilities, equipment and services (engineering services and transportation of the products, etc.) for economic and social development of the country under principles in accordance with the relevant laws and regulations of Japan. Grant Aid is not supplied through the donation of materials as such.

2) Exchange of Notes (E/N)

Japan's Grant Aid is extended in accordance with the Notes exchanged by the two Governments concerned, in which the objectives of the project, period of execution, conditions and amount of the Grant Aid, etc., are confirmed.

3) "The period of the Grant" means the one fiscal year which the Cabinet approves the project for. Within the fiscal year, all procedure such as exchanging of the Notes, concluding contracts with consulting firms and contractors and final payment to them must be completed.

However, in case of delays in delivery, installation or construction due to unforeseen factors such as weather, the period of the Grant Aid can be further extended for a maximum of one fiscal year at most by mutual agreement between the two Governments.

4) Under the Grant, in principle, Japanese products and services including transport or those of the recipient country are to be purchased.

When the two Governments deem it necessary, the Grant Aid may be used for the purchase of the products or services of a third country.

However, the prime contractors, namely consulting, contracting and procurement firms, are limited to "Japanese nationals". (The term "Japanese nationals" means persons of Japanese nationality or Japanese corporations controlled by persons of Japanese nationality.)

#### 5) Necessity of "Verification"

The Government of the recipient country or its designated authority will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be verified by the Government of Japan. This "Verification" is deemed necessary to secure accountability of Japanese taxpayers.

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- 6) Undertakings required to the Government of the recipient country
- a) to ensure prompt unloading and customs clearance at ports of disembarkation in the recipient country and internal transportation therein of the products purchased under the Grant Aid;
- d) to exempt Japanese nationals from customs duties, internal taxes and fiscal levies which may be imposed in the recipient country with respect to the supply of the products and services under the verified contracts;
- e) to accord Japanese nationals whose services may be required in connection with the supply of the products and services under the verified contracts such as facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work;
- f) to ensure that the products purchased under the Grant Aid be maintained and used properly and effectively for the Project; and
- g) to bear all the expenses, other than those covered by the Grant Aid, necessary for the Project.

#### 7) "Proper Use"

The recipient country is required to maintain and use the equipment purchased under the Grant Aid properly and effectively and to assign the necessary staff for operation and maintenance of them as well as to bear all the expenses other than those covered by the Grant Aid.

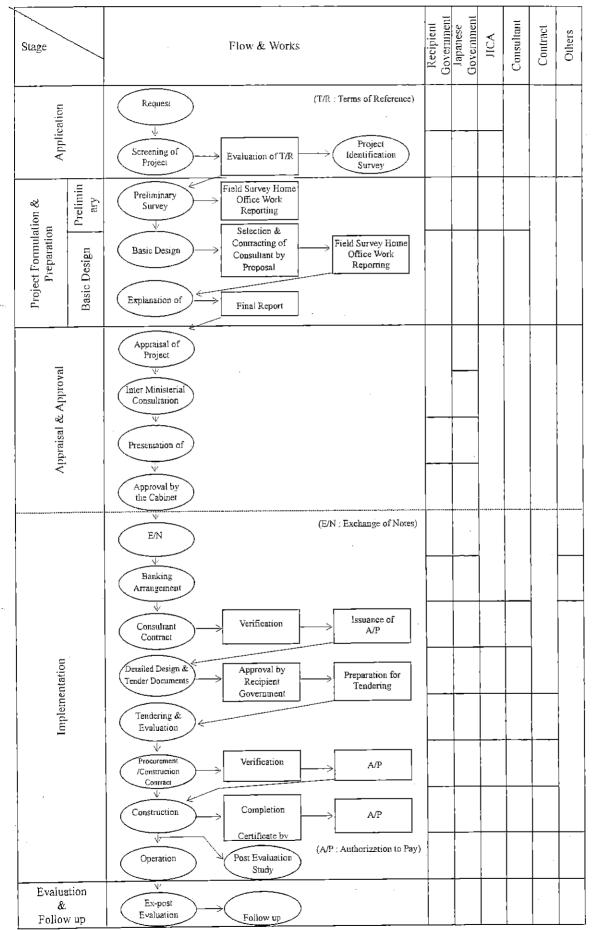
#### 8) "Re-export"

The products purchased under the Grant Aid shall not be re-exported from the recipient country.

- 9) Banking Arrangement (B/A)
- a) The Government of the recipient country or its designated authority should open an account in the name of the Government of the recipient country in an authorized foreign exchange bank in Japan (hereinafter referred to as "the Bank"). The Government of Japan will execute the Grant Aid by making payments in Japanese yen to cover the obligations incurred by the Government of the recipient country or its designated authority under the verified contracts.
- b) The payments will be made when payment requests are presented by the Bank to the Government of Japan under an Authorization to Pay (A/P) issued by the Government of recipient country or its designated authority.

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#### FLOW CHART OF JAPAN'S GRANT AID PROCEDURES

# ANNEX 3 Major Undertakings to be taken by Each Government

NO	ltems	To be covered by	To be covered by
		Grant Aid	Recipient side
1	To bear the following commissions to a bank of Japan for the banking services based upon the B/A		
1) A	dvising commission of A/P		•
2) Pa	nyment commission		•
1	To ensure prompt unloading and customs clearance at the port of disembarkation in recipient country		
1) M	arine(Air) transportation of the product to the recipient country	•	
	ax exemption and custom clearance of the product at the port of nbarkation	· .	•
3) ln	ternal transportation from the port of disembarkation to the designated site	•	
	To accord Japanese nationals whose services may be required in connection with the supply of the product and the services under the verified contract such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work		•
	To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which may be imposed in the recipient country with respect to the supply of the product and services under the verified contract		
	To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant Aid		•
6	To bear all the expenses, other than those to be borne by the Grant Aid, necessary for the transportation and installation of the equipment		•

Date : \_\_\_\_

# Japan Grant Aid Project <u>"The Project for Infectious Disease Control Phase III"</u> <u>Report on Receipt of Equipment at Lusaka</u>

Attn: JICA Zambia Office

This is to report that the Ministry of Health of the Republic of Zambia received the equipment provided by the above project. Please find attached the list of received equipment.

Sincerely,

(Signature)

Name: Title: Ministry of Health

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# LIST OF RECEIVED EQUIPMENT The Project for Infectious Disease Control Phase III

- 1. Responsible person on the receipt of equipment
  - Name
  - Title
- 2. Received item(s) & quantities:

:

:

Item(s)	Received Q'ty	Date of Reception	Remarks
Health Centre Kit	pcs.	XX/XX/2008	
			· · · · · · · · · · · · · · · · · · ·

Date : \_\_\_\_\_

# Japan Grant Aid Project <u>"The Project for Infectious Disease Control Phase III"</u> <u>Distribution Report of Equipment to DHMTs</u>

Attn: JICA Zambia Office

This is to report that the Ministry of Health of the Republic of Zambia distributed the equipment provided by the above project to the District Health Management Teams (hereinafter referred to as DHMTs).

Please find attached the list of equipment distributed.

Sincerely,

<u>(Signature)</u> Name: Title: Ministry of Health

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# LIST OF EQUIPMENT DISTRIBUTED

# The Project for Infectious Disease Control Phase III

1. Responsible department & person for the distribution of equipment:

Department

- -

Name Title 7. F - 7 - 1. - 7 - . U сі.

								ļ
	Remarks							
	Quantity	bcs.	 	 	 ••	 	••	
	Distribution Date	(XX/XX/2008)	 	 	 •••	 		
	Name of DHMT	Ndola DHMT		 	 	 	••	
Distributed item(s)	Item(s)	Health Centre Kit	 					

SKIN

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Date

#### Japan Grant Aid Project

# <u>"The Project for Infectious Disease Control Phase III"</u> <u>Distribution Report of Equipment from (name of district) Health</u> <u>Management Team to Health Centre</u>

Attn: JICA Zambia Office

This is to report that the (<u>name of district</u>) Health Management Team distributed the equipment provided by the above project to the Health Centres as attached.

Please find attached the list of equipment distributed.

Sincerely,

(Signature)	
Name:	
Title:	
Ministry of Health	

# LIST OF EQUIPMENT DISTRIBUTED

The Project for Infectious Disease Control Phase III

 Responsible department & person for the distribution of equipment: Department : (name of district) Health Management Team

	- ,	
τ	Name	Title

2. Distributed item(s)

[							 	
	Remarks							
	Quantity	pcs.	 	 .,				
	Distribution Date	(XX/XX/2008)	 	 	•		 	
	Name of Health Centre	XXXX Health Centre	 	 		••	 	
Distributed item(s)	Item(s)	Health Centre Kit						

SKM



# Japan Grant Aid Project <u>"The Project for Infectious Disease Control Phase III"</u> <u>Report of Follow-Up Survey</u>

Attn: JICA Zambia Office

This is to report that the Ministry of Health of the Republic of Zambia implemented follow-up survey regarding the equipment provided by the above project.

(Please describe here the impact and effects of this Project, including specific indicators showing the effect of the Project)

Sincerely (Signature) S.K. Mili  $\Omega r$ Name: permanent secretary Title: Ministry of Health

#### 5. References

No.	Title	Source	Year
1	Fifth National Development Plan 2006-2010	MOFNP	2006
2	National Health Strategic Plan 2006-2011	МОН	2005
3	National HIV and AIDS Strategic Framework 2006-2010	МОН	2006
4	Action Plan 2004	МОН	2004
5	Action Plan 2005	МОН	2005
6	Action Plan 2006	МОН	2006
7	Action Plan 2007	MOH	2007
8	2005 Annual Report	МОН	2006
9	Action Plan 2004	МОН	2004
10	Annual Health Statistical Bulletin	МОН	2006
11	Zambia Health Sector Support Mapping Report	DFID	2006
12	Transport Management Strengthening for MOH	DFID	2004