Preface

In response to a request from the Government of the Republic of Angola, the Government of Japan decided to conduct a Basic Design Study on the Grant Aid for Infectious Disease, the Project for Malaria Control, and entrusted the study to the Japan International Cooperation Agency (JICA).

JICA sent a study team to the Republic of Angola in July 2004.

The team held discussions with the officials concerned of the Government of the Republic of Angola, and conducted a field study at the study area. After returning to Japan, the study team conducted further studies and, as a result, is presenting this final report.

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

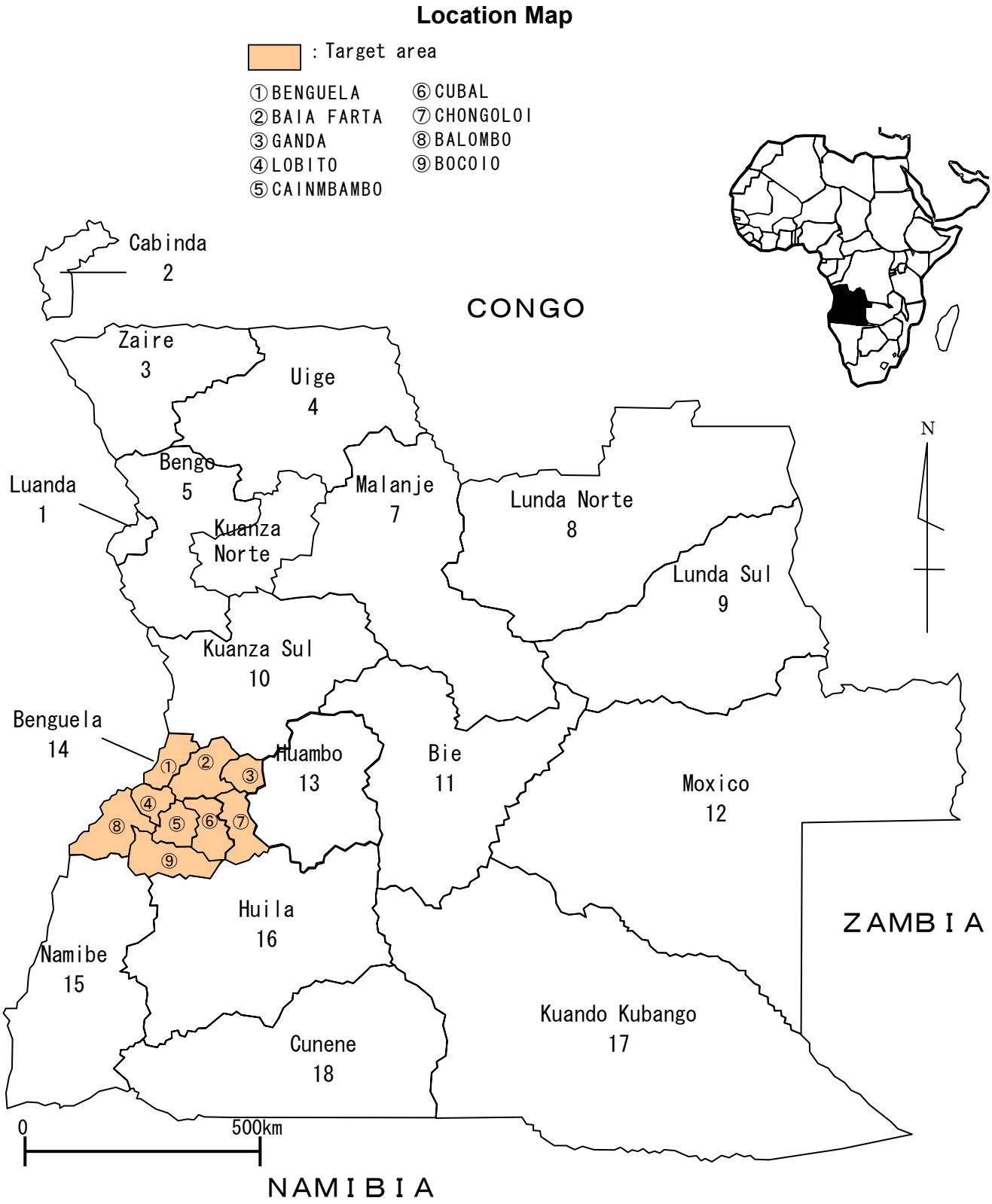
July 2004

Seiji Kojima

Vice-President

Japan International Cooperation Agency

Location Map



Abbreviations

ACT	Artemisinin-based Combination Treatment for Malaria
AFRO	WHO Regional Office for Africa
AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Care:
CE	Conformite Europeene (French) : Standard Certification
CPU	Central Processor Unit: for computer
DAC	Development Assistance Committe
GFATM	Global Fund Against AIDS, Tuberculosis and Malaria
IPT	Intermittent and Preventive Treatment: method for malaria
ISO	International Organization for Standardization
ITN	Insecticide Treated Net: impregnated Mosquito net
JICA	Japan International Cooperation Agency
JIS	Japan Industrial Stantdard
LLIN	Long Lasting Insecticidal mosquito Net
MENTOR	Malaria Emergency Technical and Operational Response: NGO in Angola
NGO	Non Governmental Organization
NPMC	National Program for Malaria Control
PSI	Population Services International : NGO in Angola
PTP	Press Through Package: method of package for tablet
RDT	Rapid Diagnostic Test: a method for malaria lab test
UNDP	United Nations Development Programme
UNICEF	United Nation Children's Fund
UPS	Uninterrupted Power Supply
WHO	World Health Organization

Chapter 1 Background of the Project

The health indices of the Republic of Angola (herein after referred to as "Angola") show a high population growth rate of 3.0% and a low average life expectancy of 46.5 years. The number of people aged 15 or younger accounts for 45% of the entire population. The mortality rate of children under 5 years of age is 195/100,000, the second highest in the world. The maternal mortality rate is also high of 1,854/100,000, urgently needing effective measures to improve the health environment of Angola. Malaria epidemic, in particular, is a socioeconomic concern, as the disease has the highest morbidity and mortality rates in the country. Table 1-1 below shows the morbidity rates of major diseases in Angola in 2002.

Table 1-1 Situation of Disease in Angola

Disease	N. of patients	%	Mortality	%
Malaria	1,862,662	63.7	14,434	58.9
Diarrhea	388,764	13.3	2,565	10.5
Acute Respiratory Infectious disease	384,040	13.2	2,411	6.0
Measles	14,722	0.5	1,466	4.5
Tuberculosis	18,006	0.6	1,099	4.4
Meningitis	2,171	0.07	721	2.9
Jandice	12,666	0.4	455	1.9
Neonatal Tetanus	802	0.02	385	1.6
AIDS	908	0.03	227	0.9
Trypanosomiasis	3,116	0.1	89	0.3
Others	232,000	7.9	651	2.7
Total	2,919,857		24,503	

MOH Report 2002

Of all malaria cases in Angola, tropical malaria (*Plasmodium falciparum),* the most severe and fatal form of malaria, accounts for 92% of the country's malaria incidence, followed by 7% tertian malaria (*Plasmodium vivax)* and 1% quartan malaria *(Plasmodium malariae)* which are slight illness compared with tropical malaria.

According to the 2003 report of the Ministry of Health, there were a total of 1,779,000 cases of malaria in Angola, of which 20,385 resulted in death. Children under 5 years of age accounted for 60% of malaria-caused deaths (nearly 12,000 children), and expectant and nursing mothers accounted for 20% (close to 2,000 women).

An annual cost of US$10 – 30 is spent for treating each malaria patient, who has to take an absence of 25 to 28 days from school or work. This places a significant financial burden especially on poor people living in rural areas, especially when combined with a loss of time and income for the family members who need to care for the patients, the cost of which has yet to be estimated.

Due to lack of financial, human, and other resources, the Angolan government has to rely on external assistance from international organizations and their affiliated NGOs, church organizations, and other donors for controlling malaria. For instance, to control the spread of malaria, certain NGOs have been distributing Impregnated Mosquito Nets by establishing a special unit (hereinafter referred to as "Net Distribution Unit") in each Health Post (having no doctor or facility for hospitalization) and Health Center (with hospitalization facility but smaller in scale than hospitals), through which they also re-treat the nets with insecticide and provide necessary guidance. Distribution of mosquito nets in Angola began in 1998 under the aid of UNICEF and NGOs and it is still being carried out mostly by the volunteers from NGOs and church organizations. Generally, mosquito nets are sold at US$3 – 4 each, but UNICEF provides 20% of its total supplies free of charge for the poor people. Despite these efforts, the diffusion rate of mosquito nets for malaria control remains low, accounting for only 10% of the entire households in Angola.

Because of a shortage of medical facilities and the underdeveloped transportation system, only 15% of people who are struck by malaria can get to a health facility to be treated within 24 hours after the onset of the disease, while the remaining 85% cannot overcome difficult access. In addition, while 40% of the medical/health facilities in the country retains a stock of malaria drugs for one week or longer, 60% suffers from a chronic shortage of malaria drugs. In Angola, primary health care is supposed to be provided by Health Posts (with nurses but no doctor), and secondary care by Health Centers (some of which are staffed by doctors and equipped with smaller scale hospitalization facilities) and hospitals. Reports say, however, that, in the wake of the civil war that demolished many buildings and strained the country's finances, restoration of medical facilities has not been committed; medical facilities destroyed during the civil war, and Health Center and Health Posts yet to be staffed and nonfunctional accounts for 70% of total medical facilities.

Presently, simple malaria[1] cases in Angola are treated by monotherapies with Chloroquine, to which malaria in Angola is developing increasing resistance. According to the research conducted in conjunction with WHO's Regional Office for Africa (AFRO) in 2003, 56% of malaria-causing parasites have developed resistance to Chloroquine, significantly reducing the efficacy of the drug against malaria. As a result, patients with some disposable income buy other anti-malaria drugs sold on the market to treat the disease.

The trend of malaria's increasing resistance to Chloroquine is seen in all parts of Africa, and some African nations are switching to Artemisinin[2]-based Combination Therapies (hereinafter referred to as "ACTs") that combine Artemisinin and other anti-malaria drugs. WHO is recommending ACTs as preferred therapies against malaria because of their high efficacy and low likelihood to produce drug resistance. The Angolan government has also decided to switch from monotherapies with Chloroquine to ACTs soon.

It would be necessary to fortify the control of maternal malaria infection, as it affects not only the mothers but also the fetuses. Under the guidance of WHO, the Angolan Health Ministry is promoting the Intermittent Preventive Treatment (IPT[3]) for expectant and nursing mothers who could be infected with malaria. However, only 22% of them are treated by IPT, as most of them do not visit public health/medical facilities for antenatal care and other services.

Patients with severe cases of malaria tend to develop coma, jaundice, renal failure, hypoglycemia, acidosis[4], hyperpyrexia, and other serious symptoms that often result in death. Intravenous or oral administration of Quinine is the most popular method to treat such patients. Quinine must be administered under careful supervision of a doctor, who monitors the condition of the patient by checking his/her blood sugar level and electrocardiogram. Recently, other drugs for treating severe malaria have been developed, some of which are

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[1] exhibits such symptoms as intermittent fever, chill, shivering, sweating, headache, muscle/joint pain, weakness, and nausea accompanied by high fever of 40°C or higher and enlarged spleen. Simple malaria in early stages can be treated with anti-malaria drugs, but delayed treatment could lead to development of complicated malaria, which often causes death.

[2] Artemisnin: an anti-malaria drug derived from a Chinese medicinal herb (*Artemisia annua*) that kills malaria parasites by inhibiting the action of a metabolic enzyme that is vital for pumping calcium in and out of the parasites' cells.

[3] IPT: a preventive therapy that administers anti-malaria drugs to pregnant women during routine antenatal clinic visits regardless of whether or not they are infected with malaria.

[4] Acidosis: a condition in which a shift in the body's pH balance causes the body's system to become acidic from its natural state of slightly alkaline. High acidity could lead to mental derangement, coma, and/or death.

now being used as easier-to-handle alternatives to Quinine.

Diagnosis of malaria is done either by microscopy, in which a specialized lab technician directly observes dyed malaria parasites in the blood specimen, or Rapid Diagnostic Tests[5] (RDTs), which detects antigens derived from malaria parasites. Although RDTs are easy and convenient methods, the cost per test is significantly higher than that of microscopy, as RDTs use disposable test sticks. Thus, microscopy remains to be the method of choice by the Angolan government for malaria diagnosis due to strained finances. The accuracy of microscopic malaria Lab test tend to be higher among experienced skilled technicians, which means that newly assigned lab technicians need to be trained sufficiently before actually performing these examination. However, only 20% of the medical facilities in Benguela Province, the target area of this project, can perform microscopic malaria Lab test, and most of them (Health Centers and Health Posts) are not equipped with Laboratory instruments or staffed by lab technicians. Moreover, even medical facilities that are originally equipped to perform malaria diagnosis are suffering from chronic shortages of essential reagents, instruments, and supplies, including Giemsa's stain solution, slide glass, and so on, and also have only insufficient or deteriorated microscopes, many of which need to be renewed. To cope with the situation, medical facilities that are insufficiently equipped to conduct malaria diagnosis usually prescribe an anti-malaria drug (Chroloquine) if the patient exhibits malaria-like symptoms.

RDTs can detect malaria quickly by simply dropping the patient's blood on a special test strip. They require no special skills and can be easily performed by nurses and therefore are very useful especially for those medical facilities not adequately staffed or equipped for diagnosing malaria. However, due partially to strained finances, RDTs are not usually performed in Angola though they were used on a trial basis for a brief period of time.

As education and publicity play a key role in the prevention of malaria, the Angolan government, in conjunction with WHO and UNICEF, is carrying out publicity campaigns

[5] RDTs: diagnose malaria by using a test stick coated with monoclonal antibodies that react with metabolic enzymes released by malaria parasites into the cells. The result of these tests can be obtained within 10 – 15 minute without special skills.

through TV, radio, and other mass media, using animation characters etc. The government is also conducting educational programmes through churches and NGOs for local residents and families on the prevention of malaria. However, the messages are not spreading effectively, as evidenced by the fact that almost 40% of the population is not even aware that malaria is transmitted via Anopheles mosquitoes, which shows there is still necessity of education and publicity as one of the important issues of Angola. The Angolan government intends to enhance the educational activities through financial assistance from the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM) [6].

According to a report, indoor insecticide spraying and extermination of Anopheles mosquito larvae have been carried out in Kabinda, Zaire, and other Provinces in northern Angola. Training of the insecticide spraying teams was conducted in 2004 through assistance from WHO in the four high-risk southern Provinces of Namibe, Cunene, Huila, and Huambo. Similar training is scheduled for 2005 in Benguela and other Provinces in central Angola. However, the Benguela Province Health Department possesses no organization, personnel, or equipment to exclusively carry out such tasks. Extermination is done only on a trial or emergency basis, and insecticide spraying is actually done by NGO members.

To rectify the extremely high morbidity and mortality rates of malaria, the Angolan government has formulated national programmes for controlling malaria.

The Angolan government formulated the Roll Back Malaria 5-Year Strategy (2003 –2007) based on the Roll Back Malaria[7] Global Partnership that was launched in 1998 by WHO, UNICEF, the World Bank, and UNDP, and based also on the Abuja Declaration of April 2000. The Strategy aims to reduce the number of malaria patients by at least 25% from the 2002 record by the year 2006 and by 50% by 2007. However, due to inadequate resources, these targets were later modified and the implementation was deferred to a later five-year period between 2005 and 2009. The modified strategy seeks to i) reduce the number of

[6] Global Fund to fight AIDS, Tuberculosis and Malaria was created in 2002 to finance a dramatic turn-around in the fight against HIV/AIDS, tuberculosis, and malaria in developing countries. Japan is one of the contributors to this Fund.

[7] Roll Back Malaria Global Partnership: a global initiative made up of WHO, UNDP, UNICEF, and various donor countries, NGOs, and corporations to provide a coordinated approach to fighting malaria in the malaria-epidemic countries.

malaria patients in Angola from the current 3 million to 0.9 million in five years, and ii) lower malaria mortality rate to reduce the social cost of the disease thereby contributing to the socioeconomic development of the country. As specific targets, the modified strategy aims to i) guarantee that 60% of the population exposed to the risk of malaria infection will have access to effective treatment, ii) enable 90% of pregnant women attending antenatal care services to receive IPT, iii) guarantee access and effective use of impregnated nets by 80% of children under 5 and pregnant women so that they can sleep peacefully, iv) provide sufficient amounts of chemicals and tools and establish insecticide spraying teams in Namibe, Cunene, Huila, Kuando, Kubamgo, and other areas of endemic with malaria, v) enable all provincial hospitals and 70% of municipal hospitals to perform microscopic malaria Lab tests, and vi) develop the capacity of the Ministry of Health , National Malaria Control Project (NMCP), and Provincial Health Departments for effective coordination, stewardship, and management of malaria control activities.

In early 2004, GFATM decided on the support for Angola's malaria control programmes and approved 25,259,000 dollars (approx. 2.78 billion yen) to cover the first two years of the 3-year period between 2004 and 2006 for which 38,383,000 dollars were requested.

GFATM's malaria control programme makes a plan to procure a total of 1.45 million mosquito nets, of which 650,000 nets are to be distributed throughout Angola in 2004 and 800,000 nets in 2005. GFATM also makes a plan to adopt ACT for treating malaria and will procure 50 million ACT tablets in 2004 and another 50 million tablets in 2005 along with microscopes, reagents, vehicles, and other necessary equipment and supplies. In addition, a massive-scale support is also underway, including training courses and workshops for administration staff of malaria control programmes as well as procurement of materials for educational campaigns, insecticides for retreating mosquito nets, transportation vehicles, and other equipment and supplies for supporting monitoring, diagnosis, and treatment activities.

With malaria being Angola's major health threat as described above, the Angolan government formulated the National Malaria Control Programme and has been requesting assistance from international organizations and donor countries including Japan. The initial

contents of the request to Japan, the objective of which was to reduce the malaria morbidity among children under 5 and pregnant women in the two Provinces of Luanda, where the country's capital is situated, and Benguela in southwestern Angola, consist of procurement of necessary equipment and supplies in a total of 426 million Japanese yen, including anti-malaria drugs, impregnated mosquito nets, diagnosis equipment, insecticides and sprayers to kill mosquitoes at the breeding ground and people's houses, vehicles, and computers.

Concurrently with the above, the Angolan government made a plan to launch a large-scale countrywide malaria control programme backed by GFATM that approved Angola's assistance request in 2004.

The initial request for this project was to cover Luanda and Benguela Provinces. However, other donor countries and UNICEF, NGOs, and other aid organizations are already implementing various malaria-related projects in Luanda Province, which is also covered by GFATM's nation-wide malaria control programme in Angola. If this project included Luanda Province, it would create redundancies and obscure the effects and outcome to be produced by Japanese assistance. Therefore, the Angolan Ministry of Health requested the Japanese study team to concentrate the efforts of this project on Benguela Province, to which the Japanese side accepted in consideration of the optimum input in relation to the outcome.

Benguela Province, the target area of this project, consists of nine cities of Baia Farta, Balombo, Benguela, Bocoio, Caimbambo, Chongoroi, Cubal, Ganda, and Lobito. It has a population of 2,148,911, the second largest following the Luanda Province where the nation's capital is situated.

The contents of the initial request were also modified, as a result of excluding Luanda Province and recalculating with the Angolan Ministry of Health the needed quantities of mosquito nets and other items for which parameters for estimation had not been clearly established.

At the time of submitting the request to Japan, the Angolan government had decided to switch from monotherapy with Chroloquine to one of ACTs but not decided on which ACT regimen to use. The Angolan government initially requested Japan to procure the Artesnate + Amodiaquine combination drugs because of its high efficacy and low cost, but later changed the

drug policy in November 2004 to adopt Artemether + Lumefantrin (Coartem®). This ACT is manufactured only by one company and sold as the highest priced ACT on the market. This company sells the same ACT to WHO at a considerable discount and in an entirely different PTP[7] sheet from that sold commercially. WHO does not resell this ACT to private sectors and declined our request to provide the ACT for Japan's grant aid projects. We also requested the manufacturer to supply the drug at WHO price, but they turned it down, referring to scarce stock. Under these circumstances, Japanese side informed to the Angolan government that this particular ACT was not available and needed to be excluded from this project. The Angolan side responded by stating that although they were aware of the short supply of the ACT (Artemether + Lumefantrin) in the international market due to exceeding demand, it would become impossible to treat simple malaria in Benguela Province if ACT was excluded from this project, as the Province would not be supplied with any ACT under the GFATM programme either. Subsequently, the Angolan government re-requested ACTs of Artesnate + Amodiaquine instead, upon confirming the Angolan Health Ministry's view that although this combination was not in keeping with the country's drug policy, the policy did not necessarily exclude other ACTs as alternatives. The Angolan government stipulated this view in an official document and submitted it to the Japanese government. In view of the circumstances and in consideration of the importance of procuring effective anti-malaria drugs for Benguela Province as the target area of this project, it was finally decided to procure the ACTs of Artesnate + Amodiaquine as originally requested.

Currently, insecticide treated net (hereinafter referred as "ITN[8]") is by far the most common type of mosquito net distributed in Angola. As the insecticide on ITNs usually expires in 6 months to 1 year, it needs to be reapplied for a fee even for the nets provided by UNICEF. ITNs are sold at the Net Distribution Unit of each Health Post or Health Center around US$4 each, whereas ITNs sold on the market by NGOs cost US$15 – US$25 each. Proceeds of mosquito-net sales are distributed to the NGOs and the Provincial Health Department with the former taking 50% of the funds as handling fees, and the latter reserving the other 50% for

[8] PTP (push-through package): a plastic sheet containing medical tablets in transparent pockets on the top side that can be pushed out through the bottom side. Also called blister package.
[9] ITN: a mosquito net, the surface of which is treated with insecticide that lasts 0.5 – 1 year.

malaria control activities. Mosquito nets are managed by keeping shipment records and controlling inventory. In Benguela Province, mosquito nets are distributed by the Distribution Units of the NGOs, as well as those of Municipal Health Bureaus.

While the currently distributed ITNs need to be retreated with insecticide every 6 months to 1 year, the recently WHO endorsed Long lasting Insecticidal Nets (hereinafter referred to as "LLINs[9]") do not require re-treatment and remains effective for 3 to 5 years. Many Angolan people do not retreat their ITNs because of the time and cost required.

The global trend of mosquito nets for controlling malaria is shifting from ITN to LLIN. The Angola government, which initially requested both ITNs and LLINs for this project, later submitted a revised request to procure LLINs exclusively, to which the Japanese side accepted in consideration of the advantages of LLINs and the low re-treatment rate of ITNs in Angola. This project will procure and distribute mosquito nets for children under 5 and pregnant women for the following reasons: i) young children are more susceptible than adults to malaria due to underdeveloped immune system (in fact, the malaria mortality rate is highest among children under 5 in Angola), ii) pregnant women are also susceptible to malaria because their immune systems are temporarily compromised during pregnancy (their malaria mortality rate is second highest following children under 5), and iii) even when pregnant women with malaria are successfully treated, they become susceptible to other problems including premature delivery, miscarriage, stillbirth, and low-weight birth that create additional physical and financial burdens.

The Study Team surveyed several medical facilities in Benguela Province in regard to the diagnostic method of malaria and found out the only 19 out of 189 facilities (hospitals and Health Centers) were equipped to perform microscopy for diagnosing malaria. The quantity of microscopes distributed to these facilities was not sufficient, and many of them were deteriorated. The existing microscopes use both a reflective mirror and a lamp as the light source. However, because of frequent electric power outages that sometimes last for a few days, microscopic tests are mostly performed using the reflective mirror as the light source. We observed some laboratories where technicians were moving their microscopes along with

[10] LLIN: a mosquito net that is impregnated with insecticide, which is bound within the fibers that make up the netting and is "slow released" over a 3 – 5 year period. Unlike ITN, LLIN does not require re-treatment with insecticide.

the movement of the sun light to catch a sufficient amount light that could not be obtained indoors.

The Provincial Health Bureau distributes essential drugs to each Health Center and Health Post by using a small-sized truck appropriated to the Public Health Bureau of the Provincial Health Department. However, the Malaria Control Office, the agency to actually implement this project, does not have a vehicle and is not capable of transporting large volumes of supplies to be procured by this project and therefore method of transportation needs to be strengthened in this regard.

Health/medical facilities in Benguela Province consist of one provincial hospital (top referral hospital), seven municipal hospitals, 22 Health Centers, and 153 Health Posts. At the time of survey in FY 2000 there were only 59 Health Posts, which have since been increased to 153 presently. There are also other small-scale medical facilities operated by churches and NGOs. Table 1-2 below shows the numbers of different kinds of medical facilities in each city in Benguela Province.

Table 1-2 Medical Facilities in Benguela Province

Name of District		Provincial Hospital	Municipal Hospital	Health Center	Health Post	Others
1	BENGUELA	1	-	10	21	-
2	BAIA FARTA	-	1	3	15	1
3	GANADA	-	1	1	30	-
4	LOBITO	-	1	7	15	3
5	CAINMBAMBO	-	1	-	20	-
6	CUBAL	-	1	-	17	
7	CHONGOLI	-	1	-	16	-
8	BALOMBO	-	1	-	10	-
9	BOCOIO	-	-	1	9	1
Total		1	7	22	153	5

(Dept. of Health of Benguela Province 2005)

Chapter 2 Contents of the Project

2-1 Basic Concept of the Project

(1) Overall Development Objective and Specific Project Objective

As mentioned earlier, the Angolan government formulated the Roll Back Malaria 5-Year Strategy in line with the Roll Back Malaria Global Partnership initiated by WHO etc. and the Abuja Declaration. This National Strategy aims to reduce the incidence of malaria thereby alleviating the negative impact of the disease and contributing to the socio-economic development of the country. As specific targets, the Strategy aims to provide insecticidal mosquito nets for 60% of children under 5 and pregnant women to ensure peaceful sleep and to guarantee at least 60% of the population easy access to effective treatment within 24 hours after the first sign of infection with malaria.

The objective of this project is to provide certain equipment and supplies for malaria control in Benguala Province as part of the above-mentioned National Strategy thereby supporting the endeavors of the Angola government to control malaria.

(2) An Overview of the Project

This project will procure Long-Lasting Insecticidal Nets (LLINs), anti-malaria drugs, microscopes and other diagnostic instruments and supplies, vehicles, computers, etc. and distribute them to Benguela Province as the project's target area to strengthen the malaria control measures of the region and reduce the morbidity and mortality rates of malaria, thereby contributing to the improvement of the health/medical environment in the Province. Taking into account the implementation capacity and other factors on the recipient side, this project will be implemented over a two-year period, during which the equipment and supplies, except for certain items, will be delivered in two installments.

2-2 Basic Design of the Requested Japanese Assistance

2-1-1 Design Policy

(1) Basic Policy

The target area of this project initially consisted of two Provinces of Luanda and

Benguela. However, when Luanda Province, where Angola's capital is located, was later excluded from the project, the quantities of the requested equipment items were adjusted accordingly. Also, two types of mosquito nets (ITNs and LLINs) were originally requested by the Angolan government but later consolidated into LLINs. It was decided to take the route of Provincial Health Department→Municipal Health Bureau→medical facility to distribute these mosquito nets and other equipment and supplies under this project for a number of reasons. Firstly, Benguala Province already has a system in place to distribute "essential drugs" and operates mosquito nets distribution units in some areas under direct jurisdiction of the Provincial Health Department. Secondaly, NGOs would charge handling fees to distribute mosquito nets, whereas using the Provincial distribution network would incur no additional cost.

While mosquito nets are usually distributed for a fee in Angola, this project will distribute LLINs free of charge among the target population in order not to create financial burden on poor families and to promote the diffusion of mosquito nets. The quantity of LLINs to be procured for this project was calculated based on the "60% distribution rate" as targeted by the 5-Year National Strategy that is currently being revised among children under 5 (20% of the total population (2,148,911) in Benguela Province in 2006 = 429,782) and pregnant women (5.2% of the total population = 11,743), which also comprise the target population of this project.

As for anti-malaria drugs, it was decided in view of various circumstances to procure the initially requested ACT (Artesnate + Amodiaquine), although it is not consistent with the drug policy of the Angolan government.

For treating severe cases of malaria, Quinine drip infusion (including solution, intravenous giving set, scalp vein) and Quinine tablets will be procured. Since malaria treatment with Quinine requires fine adjustment under doctor's direct observation, Quinine and related supplies will be provided only for medical facilities employing full-time doctors. Artemether injection (with syringes), which is easier to handle than Quinine injection, will be procured for Health Centers and Health Posts without doctors. The quantity of Quinine (solution and tablets) was calculated based on the number of patients with severe malaria (estimated at 3% of the target population) and the treatment method used in Benguela

Province.

For preventing and controlling malaria during pregnancy, this project will procure Sulfadoxine-Pyrimethamine for IPT, as it is recommended by WHO. As mentioned earlier, the Angolan government aims to raise the ratio of pregnant women who visit public health facilities for regular antenatal checkup from current 22% to 60%, which is consistent with the target of the GFATM malaria control programme. Assuming that this ratio will not rise immediately to 60%, this project will procure the IPT drug to cover 40% of pregnant women for the first year and 60% for the second year.

As for malaria Lab testing equipment, this project will procure microscopes, malaria Lab test instruments and supplies, such as Giemsa stain solution, fixing alcohol, disinfecting alcohol, xylene, slide glass, etc. as well as RDTs. A total of 29 microscopes will be procured to renew deteriorated existing ones and to furnish newly established Lab testing facilities. This project will procure binocular biological microscopes of the same type as the existing ones that use a reflective mirror and a lamp as the light source attached with a solar electric power system to compensate unstable electric power supply and insufficient indoor luminosity that could affect the accuracy of diagnosis.

Malaria Lab test instruments and chemicals will be procured in a quantity necessary to Lab test for 60% of malaria patients at the target facilities for one year. Additionally, this project will procure one multi-viewing microscope for the Malaria Control Office of the Provincial Health Department for malaria diagnosis training.

One computer each will be distributed to nine Municipal Health Bureaus, excluding Provincial Health Department and Lobito Municipal Health Bureau that are already equipped with computers, for collecting and analyzing data and controlling equipment and supplies related to malaria control.

It was initially requested to supply 11 motorcycles for each Municipal Health Bureau but they were later excluded from the equipment list, as their effectiveness could not be validated considering the large coverage area of each city of 4,425km^2 on the average, which is about the same size of Yamanashi Prefecture, Japan. Instead, this project will procure 10 pickup trucks to supply each of the nine Municipal Health Bureaus and the Provincial Health Department's Malaria Control Office for expediting their surveillance and educational

activities and for transporting large volumes of equipment and supplies to be procured under this project, which cannot be handled with the small truck currently owned by the Provincial Health Department.

Larvicide was also excluded from the equipment list, as the implementation system and the rationale for the requested quantity could not be verified. Larvicide mist blowers, indoor sprayers and entomology instrument set were also excluded for the same reason. Table 2-1 below shows the list of equipment finally requested for this project.

(2) Policy on the Procurement/Installation Environment

No installation work will be required, as this project will procure movable microscopes with a solar power packaged system on wheels.

(3) Policy on the Employment of Local Vendors

Computers will be procured from local suppliers because these computers will be installed with a Portuguese operating system and need technical support after installation.

(4) Policy on the Operation and Maintenance by the Implementing Agency

The Benguela Provincial Health Department will have direct responsibility over the administration of this project and shall properly keep and control the records of inventory, quality, and delivery of the equipment and supplies to be procured by this project. The Health Department will also be required to monitor the malaria morbidity rate, effect of newly introduced ACT, status of malaria diagnosis, residents' usage of and response to mosquito nets (LLINs), etc. and periodically report the results to Japan via the Angolan Ministry of Health as the supervisory organ of this project.

(5) Policy on the Determination of Equipment Grade, etc.

Pharmaceutical supplies will be chosen from the products that have been approved by the Angolan government. LLINs shall be selected from those certified by WHO. Other items will be procured from manufacturers that have been obtained ISO or JIS (Japan Industrial Standard) certification. Pickup trucks will be procured from manufactures in Japan

or other countries on the DAC List.

2-2-2 Basic Plan

(1) Equipment Plan

The name, use, and quantity of each item to be procured in each phase of this project are listed below:

Table 2-1 Final Procurement Goods List

No.	Procurement Goods	I Phase	II Phase	Total	
1	Long Lasting Insecticidal Mosquito Net	128,000	85,000	213,000	pcs
2	Rapid Diagnostic Test	107,000	110,000	217,000	tests
3	Malaria Diagnostic Goods	42	42	84	sets
5	Microscope with Solar Unit	29	0	29	units
6	Multi-viewing Microscope	1	0	1	units
7	Artesnate+ Amodiaquine (ACT)	268,000	275,000	543,000	packs
8	Quinine Tablet	336,000	345,000	681,000	tablets
9	Quinine Ampule	48,000	50,000	98,000	ampules
10	Artemether Ampule (1ml)	8,000	8,000	16,000	ampules
11	5% Glucose 500ml + Infusion se t+ Disposable syringe+(Scalp vein)	48,000 (28,800)	50,000 (30,000)	98,000 (58,800)	sets
12	Sulfadoxine-Pyrimethamine Tablet (IPT)	290,000	446,000	736,000	tablets
13	Personal Computer	7	0	7	units
14	Pick-up Truck	10	0	10	units

Detailed contents of Item No. 3 Malaria Lab Testing Equipment (reagent set and testing instrument set) are shown in Table 2-2 below.

Table 2-3 compares the contents of the initial request (as stipulated in the Minutes of Discussion) and those of the finalized plan.

Table 2-2 Malaria Diagnostic Goods (Reagent set(1～6)、Instuments set(7～24))

No	Goods	Usage・Specification	Quantity		
			I Pase	II Phase	Total
1	Giemusa's Stain Solution	Dyed malaria, to use after dilution 5%	126	126	252 liter
2	Buffer tablets	Water pH regulation, pH：7.2	12,600	12,600	25,200 tablet
3	Methanol	JIS special class, Fixation	1,260	1,260	2,520 liter
4	Xylen	Cleaning, special class	504	504	1,008 liter
5	Ethanol	Disinfection, Japan Phrarmacopoeia, 500ml	672	672	1,344 bottles
6	Immersion oil	For Microscope, 100-500ml	105	105	210 liter
7	Slide Glass	Flat surfaces, washed, ground edges, 76×26mm, 0.9-1.2mm, 100pcs/ box	3,192	3,276	6,468 boxes
8	Blood lancet	Stainless, 200pcs/ box、sterile, disposable	798	840	1,638 pcs
9	Absorbent cotton	Pharmacopoeia, 500g, role	336	336	672 packs
10	Gauze	Pharmacopoeia, 30cm×10m, role	336	336	672 packs
11	Lens cleaner	20×30cm, 100pcs/ box	252	252	504 boxes
12	Examination glove	For lab. Use, Nitrile, 100pcs/ box	756	756	1,512 boxes
13	Staining vessel	10 slides, vertical, with cover	84	84	168 pcs
14	Staining jar	5 slides, vertical, with cover	84	84	168 pcs
15	Slide glass rack	Stainless steel, hold 20pcs or more	84	84	168 pcs
16	Slide glass box	Plastic/ wood, 100 slides or more	168	168	336 pcs
17	Dropping bottle	Square glass bottle, with bulb and dropper	42	42	84 pcs
18	Counter	Mechanical, 4 digits	84	84	168 pcs
19	Timer	Analogue, spine-driven, with bell	42	42	84 pcs
20	Graduated volumetric flask	Borosilicate glass, 10ml	84	84	168 pcs
21	Komagome pipette	10ml×10pcs,	42	42	84 sets
22	Reagent bottle set	PE, wide neck, 1000ml, each	42	42	84 sets
23	Graduated cylinder set	PMP, 200, 500, 1000ml each	42	42	84 sets
24	Beaker set	PMP, 200, 500, 1000ml each	42	42	84 sets

As shown on the left side of Table 2-3, the Angolan side initially requested (as stipulated in the Minutes of Discussion) Items No.1 through No.20. However, on the ground of unsound rationale for estimation or effectiveness, some items were excluded or adjusted in

the final plan as seen on the right side of the table.

Table 2-3 Comparison with request and final decision

No	Request (describe on Minutes)				Final decision			
	Equipment	I Phase	II Phase	total	I Phase	II Phase	total	
1	Long lasting insecticidal mosquito net	144,000	97,000	241,000	128,000	85,000	213,000	pcs
2	Rapid diagnostic test	134,000	137,000	271,000	42,800	44,000	86,800	tests
3	Malaria diagnostic goods	49	49	98	42	42	84	sets
4	Binocular microscope	29	0	29	29	0	29	units
5	Multi-viewing microscope	1	0	1	1	0	1	unit
6	Altesnate + Amodiaquine tablets	160,000	164,000	324,000	268,000	275,000	543,000	packs
7	Sulfadoxine-Pyrimethamine tablet	435,000	446,000	881,000	290,000	446,000	736,000	tablets
8	Quinine tablet	202,000	207,000	409,000	336,000	345,000	681,000	tablets
9	Quinine ampule	29,000	30,000	59,000	48,000	50,000	98,000	amples
10	Altemether ampule	5,000	5,000	10,000	8,000	8,000	16,000	amples
11	Infusion set	29,000	30,000	59,000	48,000	50,000	98,000	sets
12	Personal computer	10	0	10	7	0	7	units
13	Motor bike	11	0	11	0	0	0	unit
14	Pick-up truck	3	0	3	10	0	10	units
15	Bactivec	10	0	10	0	0	0	ton
16	Griselef	10	0	10	0	0	0	ton
17	Larvex 100	10	0	10	0	0	0	ton
18	Sprayer	10	0	10	0	0	0	unit
19	Sprayer	20	0	20	0	0	0	unit
20	Entomology equipment kit	10	0	10	0	0	0	sets

It means to be deleted items from initial request finally.

(2) Parameters of Estimation

Needed quantity of each item to be procured by this project was estimated based on the population of Benguela Province in 2003 and the annual population growth rate of 2.6%. Table 2-4 below shows the ratios of children under 5 and pregnant women and their estimated numbers in 2006 and 2007, as well as the actual numbers of malaria patients among different age groups.

Table 2-4 Transition of population in Benguela Province/ number of Malaria

contents	2003	2006 (I Phase)	2007(II Phase)	
Total population	2,148,911	2,320,922	2,381,266	Estimated by MOH
Under 5 years	429,782	464,184	476,253	Number/ estimation in whole country
Pregnant	111,743	120,688	123,826	
Number of patients at public Med. facilities	246,590	266,328	273,253	Reported patients 2003

Malaria	2003	%	ACT target	%*	2006 (I Phase)	2007(II phase)
0～4 years	84,485	34%	Under 7 years	40%	105,611	108,357
5～14 years	66,494	27%	7～13 years	16%	43,090	44,210
15 years over	95,611	39%	13 years over	44%	117,628	120,686
Total	246,590	100%	total	100%	266,328	273,253

*From percentage of classify the age, it is calculated percentage of each age and then estimated the percentage of each age

1) Long Lasting Insecticidal Net (LLIN)

The Angolan government has set a target in the 5-Year Malaria Control Strategy (2003 - 2007) that 60% of children under 5 and pregnant women would be using mosquito nets. In alignment with the target, this project aims to distribute LLINs to 60% of children under 5 and pregnant women by the end of the 2-year period between 2006 and 2007. The needed quantity of LLINs for this project was calculated based on the capacity of each net (2 persons per net) and by rounding up the figure to the nearest unit of 1,000.

Estimation of nets= [(the number of children under 5 and pregnant women in 2006) + the number of pregnant women in 2006]×60%×(1/2)
=212,609.4 →213,000 nets

2) Artesnate + Amodiaquine Tablet (drug for treating simple malaria)

The numbers of malaria patients in 2006 and 2007 in Benguela Province were estimated based on the actual number of patients recorded in 2003 (246,590) and the population growth rate (2.6%). Dosages of anti-malaria drugs differ among the three age groups of children under 7, between 7 and 13, and over 13 (adults). The needed quantity

of each anti-malaria drug was calculated based on the available figures as described below:

The numbers of malaria patients in 2006 and 2007 were estimated at 266,328 and 273,253, respectively based on the actual number of malaria patients in 2003 being 246,590, of which children between 0 and 4 accounted for 34% or 84,485, children aged 5 – 14 for 27% or 66,494, and adults (15 or older) for 39% or 95,611, and taking into account the population growth rate of 2.6%. Since these age groups do not correspond to those for determining dosages, percentages of the age groups under 7, 7 – 13, and over 13 were adjusted to 40%, 16%, and 44%, respectively to calculate the needed quantity of drugs.
Note: the adjustment was done by dividing the percentage of each age group of malaria patient, by the year range of that age group to obtain the average ratio of each chronological age, and adding or subtracting it to or from the percentage of each age group for dosage.

3) Sulfadoxine-Pyrimethamine Tablet (preventive anti-malaria drug for pregnant women)

This project plans to procure this IPT drug for pregnant women who regularly visit health facilities for antenatal care (ANC) to give each of them 3 tablets x 2 visits. Although GFATM aims at giving 60% of all pregnant women who have access to IPT, it is unlikely that the ratio will be increased to that level during the first year of this project. Thus, this project will procure the IPT drug for 40% of all pregnant women during Phase I and for 60% during Phase II in Benguela Province. The procurement quantity was rounded up to the nearest unit of 1,000 tablets.

The needed quantities= (120,688 women (Phase I)×40%+123,826 women (Phase II) ×60%) ×6 tablets=122,570.8×6=735,424.8 tablets→736,000 tablets

4) Quinine Tablet / Quinine ampoule/ Infusion set / Artemether ampoule (for treating severe malaria cases)

Needed quantities were calculated based on the standard regimens used locally.

Quinine Tablet	3% of all patients, 7days after infusion (take total of 42 tablets) (266,328(Phase I)×3%×42 tablets+273,253(Phase II)×3%×42 tablets) 335,573.28→336,000 tablets (Phase I) + 344,298.78→345,000 tablets (Phase II) Total：681,000 tablets
Quinine Ampoule	3% of all patients, for 2days (use total of 6 ampoules) 266,328(Phase I)×3%×6 ampoules+273,253(Phase II)×3%×6 ampoules 47,939.04→48,000 ampoules+49,185.54→50,000 ampoules Total：98,000 ampoules
Infusion set	One set for each solution: 5% glucose 500ml+infusion set (with needle)+syringe 2ml(1 syringe, disposable, sterile) 48,000(Phase I)+50,000(Phase II) Total：98,000 sets
Scalp vein	60% of the quantity above for children/ distraught patients 48,000(Phase I)×60%+50,000(Phase II)×60%=28,800+30,000 Total：58,800
Artemether Ampoule	Try into severe malaria cases (3% of the target population) 8,000 ampoules (Phase I) +8,000 ampoules (Phase II) Total：16,000 ampoules
Disposable Syringe	Attach 1 syringe as for Artemether Injection (disposable, sterile) 8,000(Phase I)+8,000(Phase II) Total：16,000 syringe

5) Malaria Diagnosis Lab testing Equipment

A total of 29 microscopes, of which 6 are for renewing existing equipment and 23 for new installation, will be procured and delivered during Phase I. In addition, one multi-viewing microscope will be installed in the Malaria Control Office of Benguela Province for educational purposes.

The amount of each reagent necessary for diagnosing malaria was calculated based on the assumption that 60% of the estimated number of patients taking malaria Lab tests would be examined by microscopy in Giemsa's staining method and 40% by RDT. The needed quantity of each item was rounded up to the nearest unit of 1,000. In Phase I, reagent sets, expendable supplies, and accessories will be procured in quantities to adequately supply for 42 laboratories, including existing medical facilities which have clinical Lab testing division, for one year, and the same quantities will be procured again in Phase II. Details of malaria diagnosis equipment are listed in Table 2-5 below. Items No.1 through No.6 are reagents, and No. 7 through No.24 are Lab testing instruments and supplies.

Table 2-5 Contents of Malaria diagnostic goods

No	goods	Way of calculation	Q'ty/lab I Phase	Q'ty/lab II Phase	Total Q'ty I	total Q'ty II
1	Giemusa's stain solution	10ml/ day×300days(1year)=3,000ml	3	3	126	126
2	Buffer tablets	1 tablets/ day×300days(1year) = 300tablets/ year	300	300	12,600	12,600
3	Methanol	100ml/ day×300days (1year) = 30,000ml/ year	30	30	1,260	1,260
4	Xylen	1L/month×12months=12L/ year	12	12	504	504
5	Immersion oil	Number of patients/ lob×0.6ml(1) 2.5L/year	25	25	105	105
6	Ethanol	Number of patients/ lab×2ml (1person) ÷500(1bottle=500ml)≒16 bottles/ year	16	16	672	672
7	Slide glass	Number of patient/ lob×2pcs (1person)/ 100 (I box/100)=76 boxes	76	78	3,192	3,276
8	Blood lancet	Patient/ lab×1pc(1person)/200 （1box 200pcs） =19 boxes	19	20	798	840
9	Absorbent cotton	Patient/ lab×1g(1person)/500 (1pack: 500g)≒8 roles	8	8	336	336
10	Gauze	500 persons/role, patient/lab÷500≒8 roles	8	8	336	336
11	Lens cleaning tissue	2 pcs/day×300 days(1year)=600 pcs 100pcs/box→6box/lab/year	6	6	252	252
12	Examination glove	6 pcs/day×300 days(1year) = 1800 pcs 100 pcs/ box→18 box/ lab/ year	18	18	756	756
13	Stain vessel	2 pcs/ lab	2	2	84	84
14	Stain jar	2 pcs/ lab	2	2	84	84
15	Slide rack	2 pcs/ lab	2	2	84	84
16	Slide box	4 pcs/ lab	4	4	168	168
17	Dropping bottle	1 pcs/ lab	1	1	42	42
18	Counter	2 pcs/ lab	2	2	84	84
19	Timer	1 pcs/ lab	1	1	42	42
20	Graduated volume. flask	2 pcs/ lab	2	2	84	84
21	Komagome pipette	1 pcs/ lab	2	1	42	42
22	Reagent bottle	1 pcs/ lab	1	1	42	42
23	Graduated cylinder set	1 pcs/ lab	1	1	42	42
24	Beaker set	1 pcs/ lab	1	1	42	42

6) Vehicle

One pickup truck each will be provided for nine Municipalities, and another one for the Malaria Control Office of the Benguela Provincial Health Department to be used exclusively for malaria control activities.

7) Personal Computer

One desktop-type personal computer (with printer and UPS) each will be supplied for seven Municipalities, excluding Benguela and Lobito Cities.

(3) Distribution Plan

1) Long Lasting Insecticidal Net (LLIN)

Because of the limited storage, distribution, and administrative capacities of the Angolan side, LLINs will be delivered in two installments; 60% of the total amount (213,000 nets) during Phase I and the remaining 40% (85,000 nets) during Phase II.

2) Artesnate + Amodiaquine Tablet (for treating simple malaria)

Based on the estimated numbers of malaria patients in 2006 and 2007, the project will deliver 160,000 packs of this ACT in Phase I (2006) and 164,000 packs in Phase II (2007).

3) Sulfadoxine-Pyrimethamine Tablet (preventive anti-malaria drug for pregnant women)

Currently only 22% of pregnant women makes regular antenatal care visits to public medical facilities, which the Angola government aims to raise to 60% in line with the target set by GFATM. As it is unlikely that this target will be achieved during Phase I, this project will procure and deliver the drug to cover 40% of the pregnant women in Phase I and 60% in Phase II.

4) Quinine Tablet / Quinine Ampoule + Intravenous Giving Set (for treating severe malaria cases)

This project will procure a total of 409,000 Quinine tablets, of which 202,000 tablets

will be delivered in Phase I and 207,000 in Phase II. It will also procure a total of 59,000 Quinine ampoule + intravenous giving sets, consisting of Quinine injection, glucose intravenous solution, infusion tube with needle, and scalp vein, of which 29,000 sets will be delivered in Phase I and 30,000 sets in Phase II.

5) Artemether Ampoule (for treating severe malaria cases)

A total of 10,000 ampoules will be procured to deliver 5,000 each in Phase I and Phase II.

6) Microscope with Solar Power Packaged System / Multi-Viewer Microscope

All 29 sets of microscope + solar power system, as well as one multi-viewer microscope will be delivered in Phase I.

7) Malaria Diagnosis Equipment (reagent/ instrument set)

A total of 84 sets will be procured to deliver 42 sets (1-year supply for the target facilities) each in Phase I and Phase II.

8) RDT Kit

A total of 217,000 RDT kits will be procured to deliver 107,000 in Phase I and 110,000 in Phase II.

9) Personal Computer / Vehicle

All 7 personal computers and 10 trucks will be delivered in Phase I.

2-2-3 Basic Design Drawing

Equipment and supplies for this project will be procured from Japan, Angola, and third countries and be delivered by holding competitive tendering to select a procurement supplier, with which a Japanese trading firm will sign a contract with Ministry of Health of Angola. Preshipment inspection of third-country products will be done by a third-party inspection agency. As for pharmaceuticals and other items that require strict quality control,

acceptance inspection at delivery site in Angola will be performed in addition to preshipment inspection.

The Malaria Control Office of the Angolan Health Ministry and the Benguela Provincial Health Department are in charge of the implementation of this project and responsible for supervising the distribution and control of the equipment and supplies, the actual transportation of which will be done by each Municipal Health Bureau under the jurisdiction of the Benguela Provincial government.

2-2-4 Implementation Plan

2-2-4-1 Implementation Policy

This project will be implemented in accordance with the framework of the Grant Aid scheme of the government of Japan and officially commenced upon signing of the Exchange of Notes (E/N) by the governments of Japan and Angola. Subsequently, a Japanese consultant firm will prepare detailed design documents and organize competitive tendering to choose a Japanese trading company to procure necessary equipment and supplies for the project.

1) Implementation System of the Recipient Country

This project will be implemented by the following government agencies of Angola:

Supervisory organ: Ministry of Health

Implementing agency: Benguela Province Department of Health

2) Consultant

After the signing of the E/N by the governments of Japan and Angola, the Japanese consultant will conclude a consultant agreement with the Ministry of Health of Angola in accordance with the procedure of the Japan's Grant Aid scheme. According to the contract, which becomes effective upon approval by the Japanese government, the consultant will render the following services in three stages:

①Preparation for tender : drafting of tender documents, finalization of specifications

②Tender : selection of a procurement supplier, support for concluding a procurement contract

③Procurement : supervision of procurement/ distribution activities

3) Procurement Supplier

The procurement supplier selected through competitive tendering will conclude an contract with the Angolan government, which becomes effective upon approval by the Japanese government. In accordance with the agreement, the procurement company will procure and transport specified equipment and supplies and deliver them to the specified destinations in Angola. The final destination of specified equipment and supplies is Benguela Province, and the procured specified products will be inspected by the Department of Benguela Provincial government when the products are arrived at Benguela Province.

2-2-4-2 Implementation Condition

Most of the equipment for this project will be procured from Japan or third countries. Items imported into Angola will undergo customs clearance procedure at Benguela Port (or Luanda Port) and then transported to the warehouse of ANGOMEDICA (a public corporation that supply pharmaceuticals) in Benguela City, up to that point the Japanese side will have the responsibility. The Angolan side will then take over the responsibility and deliver the goods from the ANGOMEDICA warehouse to the final destinations in Benguela Province.

2-2-4-3 Scope of Works

Scope of works for Japan and Angola with regard to the procurement and delivery of the equipment and supplies is shown in Table 2-6 below:

Table 2-6: Scope of Works

Work	Japan	Angola
Procurement	All equipment and supplies	—
Transportation	From Japan or third countries to the warehouse of ANGOMEDICA in Benguela Province, Angola.	From the warehouse of ANGOMEDICA to each municipal or district medical facility.

2-2-4-4 Consultant Supervision

This project is comprised of procurement of equipment and supplies, the supervision of which will be performed at the following stages:

1) Preloading Equipment Inspection

A third-party agency will be entrusted to conduct a preshipment inspection that consists of: i) checking the shipping documentation against the agreed-upon equipment list, ii) confirming the delivery date, iii) checking the quantity and packaging of each product, iv) expiration date of each pharmaceutical item, etc. The consultant will be present at the preshipment inspection of pharmaceuticals to verify them from an expert's viewpoint.

2) At the time of arrival of all equipment at the warehouse of ANGOMEDICA (a public pharmaceuticals corporation) in Benguala Province, Angola

① Acceptance inspection of equipment

All equipment and supplies for this project procured from Japan, Angola, and third countries will be delivered to the warehouse of ANGOMEDICA, when the consultant will verify the specification, quantity, and integrity of each item.

② Sorting out of equipment

The equipment and supplies delivered to the storage of ANGOMEDICA will be sorted out by the Angolan side according to their destinations.

2-2-4-5 Quality Control Plan

Each equipment item to be procured for this project needs to satisfy specific quality standards, which will be controlled by precisely defined specification sheets, acceptance inspection, and other measures.

② Long Lasting Mosquito Net (LLIN)

This project will procure WHO approved LLINs in a cubic-shaped family size of W130 x L180 x H150cm.

③ ACT (Artesnate + Amodiaquine) and other anti-malaria drugs

The drugs must be approved by the Angolan government and produced by GMP-certified manufacturers.

The eligible origins of these drugs shall be limited to the DAC list countries, including India, China, Japan, and Angola.

Disposable tubes with 23G needles and scalp veins for infusion and disposable syringes must bear the CE mark.

④ Microscope with solar power system / multi-viewing microscope

The microscope will be of a biological binocular type at a maximum magnification of 1000x attached with an infinity correction optics system, using a halogen lamp and a reflective mirror as the light source. This type of microscope shall be procured from the DAC list countries, including China and the Philippines.

The above microscope will be attached with a mobile solar power packaged system (with built-in battery and integrated controller) with a maximum electric output capacity of 75W or higher.

⑤ Malaria diagnosis instruments

Examination gloves shall be procured only from the DAC list countries, including Japan, Angola, and Malaysia.

Absorbent cotton, gauze, slide glass, blood lancet, and lens cleaner shall be procured from the DAC list countries, including Japan and Angola. Staining vessel, staining jar, slide glass rack, slide glass box, dropping bottle, counter, graduated volumetric flask, Komagome pipette, reagent bottle set, graduated cylinder set, and beaker set shall be procured from Japan or Angola. Timer shall be procured from Angola, Japan, or China.

⑥ Reagent set

This item shall be procured only from the DAC list countries, including Angola and Japan.

⑦ RDT (Rapid Diagnosis Test) kit

WHO-approved RDT kit with a quantitative immuno-assay display that can detect tropical malaria within 15 minutes shall be procured.

⑧ Computer

Desktop-type computer that is used widely in Angola and installed with a CPU (Pentium4, 2.6Ghz or higher), a hard disk (40GB or higher), and Portuguese-version Windows XP Pro OS will be procured. Each PC will be attached with a full-color monitor (17 inches or wider) and an inkjet printer than can print A4 and smaller-sized papers.

⑨ Pickup truck (4WD, double cabin)

4WD, double-cabin pickup truck for 5 to 6 (including driver) passengers with a left-side steering wheel, a diesel engine of around 2,700cc, and a hood-attachable cargo bed will be procured from the DAC list countries.

2-2-4-6 Procurement Plan

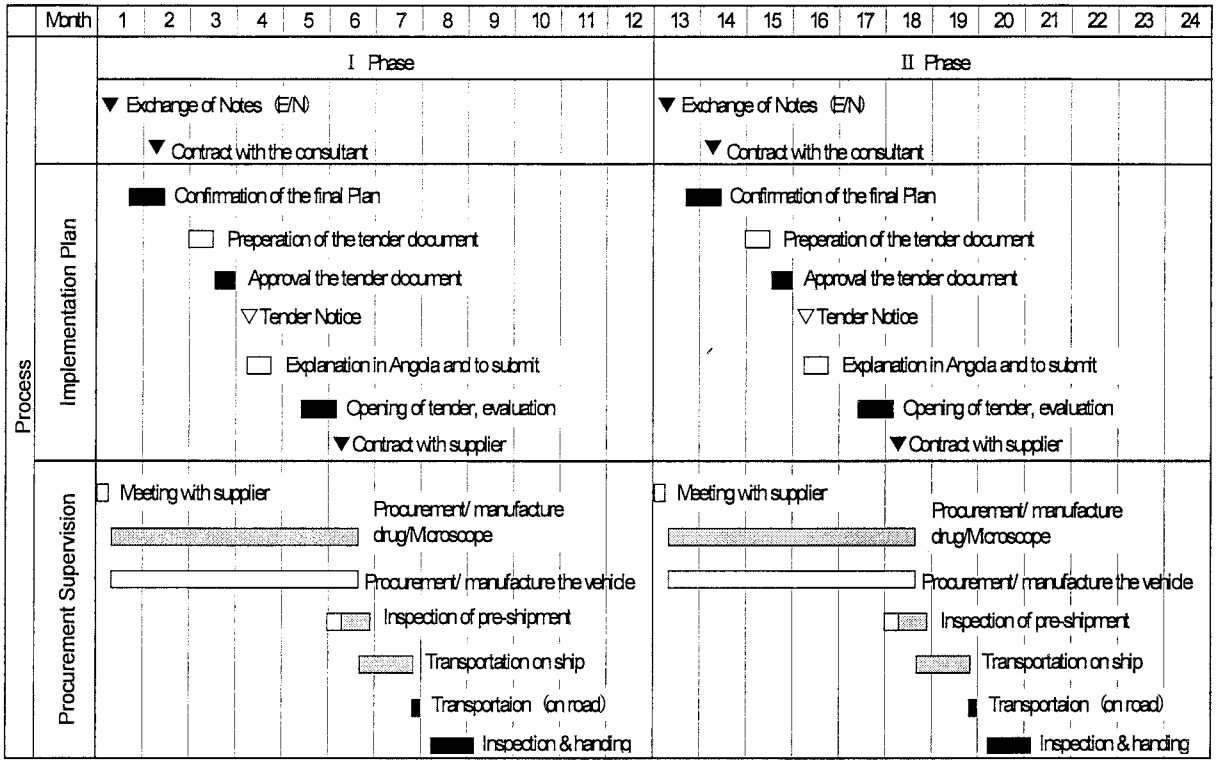
Eligible origin of the equipment to be procured for this project are listed on Table 2-7 below:

Table 2-7 Countries from Procurement

Equipment		Angola	Japan	Third county	Reason
Long lasting Insecticidal net				○	WHO recommended
Binocular microscope				○	Manufacturer products at the third countries
Malaria diagnostic goods	Reagent set			○	Quality control
	Lab instrument		○		Quality control
Multi-viewing microscope			○		Quality control
Altesnate+ Amodiaquine tablet				○	
Quinine tablet, ampule				○	
Infusion Solution, infusion set			○		
Altemether ampoule				○	
Disposable syringe				○	
Personal computer		○			Portuguese version, after sales services
Pick up truck				○	Quality control

2-2-4-7 Scope of the Works

This project will be implemented in two phases, and the equipment and supplies will be procured and distributed according to the following schedule:



2-3 Obligations of Recipient Country

In the event that this project is implemented under Japan's Grant Aid scheme, the Angolan government will be obligated to:

- Distribute mosquito nets to children under 5 and pregnant women generally free of charge and periodically deliver them to the Health Centers and Health Posts.
- Make periodic deliveries of pharmaceuticals (anti-malaria drugs, laboratory equipment and supplies, etc.) to each medical facility.
- Monitor and report to Japan of the distribution statuses of mosquito nets and anti-malaria drug, as well as their effects on the malaria morbidity rate.
- Control the inventory of the equipment and supplies procured for this project and stored at ANGOMEDICA.
- Exempt Japanese and third-country nationals engaged in this project from customs duties, internal taxes, and other fiscal levies, which may be imposed in Angola with respect to the procurement of the equipment and supplies and rendering of associated services under approved contracts.

- Accord Japanese and third-country nationals whose services may be required in connection with this project such facilities as may be necessary for their entry into Angola and stay therein for the performance of their work.
- Make necessary appropriations and employ an adequate number of personnel for the proper operation and maintenance of the equipment and supplies procured for this project to ensure effective utilization thereof.

2-4 Project Operation Plan

- The equipment and supplies for this project will be delivered to each medical facility from the Benguela Province Health Department via each Municipal Health Bureau of the nine target cities. The Benguela Provincial Health Department, which is the implementing agency of this project, needs to draft a distribution schedule to coordinate and determine in advance as to which item should be shipped out to each target city in what quantity and when.
- Mosquito nets to be procured by this project will be distributed by each Municipal Health Bureau to 10 to 20 Health Centers and Health Posts under its jurisdiction. Since these nets will be distributed generally free of charge, works required for LLIN distribution will not include accounting but consist of delivery/inventory control and other simple tasks.
- At present, only a small amount of goods are stored at the warehouse of ANGOMEDICA, leaving an ample space for storing the equipment and supplies to be procured by this project. However, since the GFTAM malaria control programme is also scheduled for around the same time, storage and distribution of goods to be procured by different programmes need to be coordinated by the Ministry of Health and the Department of Health of Benguela Province.

The cost for implementing this project is estimated at 264 million Japanese yen in Phase I and 182 million Japanese yen in Phase II. Table 2-8 below shows the breakdown of the estimated project cost according to the scope of works defined respectively for the Japanese and Angolan sides.

1. Cost to be born by the Japanese side

Table 2-8: Estimated Cost of the Project

Item	Estimated Project Cost (100 million yen)	
	Phase I	Phase II
Equipment	2.31	1.54
Detailed design / procurement supervision	0.33	0.28
Total	2.64	1.82

It should be noted that the above figures do not mean the upper limit of the grant to be officially stipulated in the E/N for this project.

2. Cost to be born by the Angolan side.

None.

3. Condition of Estimation

Condition of Estimation : January 2005

Exchange rate : US$1＝107.9 yen

Local currency (Kwanza) : 1Kwanza ＝1.28 yen

Chapter 3 Project Evaluation and Recommendation

3-1 Project Effect

Implementation of this project is expected to bring about the following effects:

- Introduction of highly effective ACT to replace the high resistance of Chroloquine, which has been the standard drug to treat malaria in Angola, will improve the success rate of malaria treatment and reduce the mortality rate of the disease in the target area.
- Free distribution of LLINs will increase the diffusion rate of mosquito nets in Benguela Province and reduce the incidence of malaria among children under 5 and pregnant women in the area.
- Provision of microscopes and other Lab testing instruments, as well as the expansion of the clinical Lab testing facilities of the Benguela Province, will enhance the diagnostic capabilities of the area.
- Provision of trucks will expedite the transportation and distribution of equipment and supplies related to the control of malaria and other infectious diseases and facilitate monitoring activities.
- Provision of computers will facilitate the collection, storage, and communication of information related to malaria control and enhance the capacity to control other infectious diseases.
- Procurement of equipment by this project and provision of guidance on malaria control by GFTAM will have a synergetic effect on the reduction of malaria morbidity in Benguela Province.
- The above effects will significantly reduce economic loss created by malaria in Benguala Province.

3-2 Recommendations

- This project will be implemented over a two-year period between 2006 and 2007, and afterwards the Angolan side should be able to take over and maintain the contents of this project and related systems and organizations on a sustainable basis.

- The chronic shortage of expendable supplies for malaria control will be alleviated and sufficiently supplemented by this project, after the completion of which, however, the Benguela Province will need appropriate sufficient funds to purchase necessary items on its own account on a continuing basis.
- This project will be implemented with the intention to bring about the "effects" on malaria control as listed above. The Angolan side is required to monitor the morbidity rate and other facts related to malaria and periodically report the findings to the Japanese side.

Appendix 1

Member of Study Team

Name	Belonging
1. **Tetsuo YABE**	Team Reader Grant Aid Management Department Japan International Cooperation Agency
2. **Kenya YOSHINO**	Project coordinator Grant Aid Management Department Third Group Health Team Japan International Cooperation System
3. **Kazuhiro KUROSAWA**	Procurement/ Estimation Planner Grant Aid Management Department Japan International Cooperation System
4. **Daizo ARAI**	Equipment Planner Grant Aid Management Department Japan International Cooperation System
5. **Carlos KIMURA**	Interpriter Japan International Cooperation Center

Appendix 2

Schedule of the Basic Design Study Team on the project for Malaria Control in the Requblic of Angola

No.	Date		Team Leader	Project Coordinator	Equipment Planner	Interpreter	Procurement Planner
1	7/28	Wed		17:40Narita(JL735)→ 21:10Hong Kong、23:40Hong Kong(SA7801)→			
2	7/29	Thu		→06:55Johanesburg、 10:35 Johanesburg(SA022)→ 12:15Harare、 Courtesy call on EoJ and JICA office		9:30 Johanesburg (SA054) → 12:10Luanda、Survey	
3	7/30	Fri		13:10Harare(SA023)→15:00 Johanesburg		Survey on Equipment Procurement	
4	7/31	Sat		09:30Johanesburg(SA054)→12:10Luanda		Team Discussion	
5	8/1	Sun		Team Discussion			
6	8/2	Mon		Courtesy Call on MoH, MOFA, Meeting with UNICEF			
7	8/3	Tue		Site Survey			
8	8/4	Wed	Narita(JL735)→Hong Kong、 0Hong Kong(SA287)→	Meeting with WHO, USAID		Survey	
9	8/5	Thu	→07:00Johanesburg、 9:30Johanesburg(SA054)→ 12:10Luanda	Meeting with MoH, UNICEF		Survey	
10	8/6	Fri	Meeting with MoH, UNICEF on draft of Minutes of Discussions				Survey
11	8/7	Sat	Team Discussion				
12	8/8	Sun	Team Discussion				
13	8/9	Mon	AM: Signing of Minutes of Discussions、 join the study team for Emergency Project for Rural Water Supply		15:00Luanda→16:00Benguela		
14	8/10	Tue	Emergency Project for RWS	13:50Luanda(SA055)→ 18:05Johanesburg	Benguela		
15	8/11	Wed	Emergency Project for RWS	12:50Johanesburg (SA7800)→	Benguela		
16	8/12	Thu	Emergency Project for RWS	08:00Hong Kong 09:35Hong Kong (JL730)→ 14:45Narita	16:30Benguela→17:30Luanda		
17	8/13	Fri	Emergency Project for RWS		Signing on Technical Memorandam		
18	8/14	Sat	13:50Luanda(SA055)→ 18:05Johanesburg		13:50Luanda(SA055)→18:05Johanesburg		
19	8/15	Sun	10:35Johanesburg (SA022)→12:15Harare		12:50Johanesburg(SA7800)→		
20	8/16	Mon	Report to EoJ and JICA office		08:00Hong Kong 09:35Hong Kong(JL730)→ 14:45Narita		
21	8/17	Tue	07:15Harare(SA025)→ 09:05Johanesburg 14:15Johanesburg (SQ405)→				
22	8/18	Wed	06:30Singapore 08:00Singapore(JL712)→ 15:55Narita				

Appendix 3

The List of Parties Concerned

Mitsuo Takahashi	Japan Embassy in Zimbabwe	Third Secretary
Takaki Watanabe	Japan Embassy in Zimbabwe	Special Surveyer
Hideo Eguchi	JICA Office in Zimbabwe	Resident Representative
Mr. Tomas Teixeira	Security Clark in Angola JICA Office	

Ms. Maria Do Sacramento Guerra	Ministry of Forign Affairs Cooperation Division, in charge of Japan	Bilateral
Dr. Jose Vieira Dias Van-Dunem	Ministry of Health	Vice Ministor
Dr. Miguel V.J. Miranda	Ministry of Health Director of International Cooperation	
Dr. Filomeno Fortes	Ministry of Health, NMC Office ,Director of Malaria Control	
Mr. Nilton Saraiva Francisco	Ministry of Health, NMC Office Director of Malaria Control, Epidemiologist	
Dr. Miguel Viriato Jordo Miranda	Ministry of Health, International Cooperation Division Direcotor	
Mr. Daniel Antonio	Ministry of Health Medicine Supply Division Director	
Dr. Antonio Bento	Benguela Provincial Health Department Director	
Ms. Filomena E.D. S. Quinda	Benguela Provincial Health Department Malarial Control Division, Director	
Dr. Kinanga Kiaco	WHO Angola Office	Malaria Control Adviser
Akiko Matsumoto	MENTOR	Project coordinator
Ms. Louisa Norman	PSI Angola	Project coordinator
Mr. Pedro R. Jaime	PSI Angola	Malaria Control Project Director
Mr. Jose Feritas Costa	Custamhouse Agency in Luanda	

Appendix 4

Minutes of Discussion

REPÚBLICA DE ANGOLA
ESTUDO DO DESENHO BÁSICO PARA O PROJECTO DE CONTROLE DA MALÁRIA

ACTA DAS DISCUSSOES

Com base nos resultados do Estudo Preliminar, o Governo do Japão decidiu realizar o Estudo do Desenho Básico do Projeto para o Controle da Malária (doravante a ser referido como "o Projeto") e incumbiu a Agência de Cooperação Internacional do Japão (doravante a ser referida como "JICA") de realizá-lo.

A JICA enviou para a República de Angola (doravante a ser referida como "Angola") a Equipa de Estudo do Desenho Básico (doravante a ser referida como "a Equipa"), liderada pelo Sr. Tetsuo Abe, Assistente Senior do Director Geral do Departamento de Gestão da Cooperação Não-Reembonsável da JICA, cuja estadia em Angola foi programada para entre os dias 29 de Julho e 14 de Agosto.

A Equipa realizou reuniões com as autoridades relacionadas do Governo de Angola e procedeu a inspecções de campo nos sítios de abrangência do Projecto solicitado.

No decurso das discussões e inspecções em campo realizados, ambas as partes confirmaram sobres as pautas anexas. A Equipa deverá realizar mais estudos e preparar o Relatório do Desenho Básico.

Luanda, 9 de Agosto de 2004

Tetsuo Yabe
Lider da Equipa de Estudo para o
Estudo para o Desenho Básico
Japan International Cooperation Agency

José Vieira Dias Van-Dúnen
Vice Ministro
Ministério da Saúde
República de Angola

INSERÇÕES

1. Objectivo do Projecto

O objectivo do Projecto é reduzir a taxa de morbi-mortalidade causada pela malária na Província de Benguela através da seguinte intervenção.

- provisão de equipamento e materiais para o Controle da Malária solicitados pelo Governo de Angola.

2. Local do Projecto

O local do Projecto é a Província de Benguela.

3. Órgão Responsável e Órgão Executor

3-1. O Órgão Responsável é o Ministério de Saúde.

3-2. Os Órgãos executores são o Programa Nacional de Controle da Malária do Ministério da Saúde e o Governo Provincial de Benguela.

4. Teor da Solicitação Angolana

Depois das discussões realizadas com a Equipa, os itens descritos no Anexo-1 são aquelas solicitadas definitivamente pelo Governo de Angola. A JICA avaliará a adequabilidade da solicitação e recomendará ao Governo do Japão a sua aprovação.

5. Cooperação Financeira Não-Reembolsável do Japão

5-1. O Governo de Angola compreendeu sobre o sistema de Cooperação Financeira Não-Reembolsável do Japão explicado pela Equipa, corforme descrito no Anexo-2.

5-2. O Governo de Angola tomará todas as providências necessárias conforme descrito no Anexo-3 para a boa execução do Projecto, como condição para que a Cooperação Financeira Não-Reembolsável do Japão seja implementada.

6. Programa do Estudo

6-1. Os consultores procederão com mais estudos em Angola até o dia 14 de Agosto de 2004.

6-2. Baseado nas Actas das Discussões e exame técnico dos resultados do estudo, a JICA completará o relatório final e o enviará ao Governo de Angola até o final de Dezembro de 2004.

7. Outros Assuntos Pertinentes

7-1. O Governo de Angola deverá alocar o orçamento e quadros necessários para a implementação do Projecto.

7-2. Ambas as partes confirmaram a adequabilidade do Projecto ser dividido em 2 fases.

7-3. Ambas as partes confirmaram que o Programa Nacional de Controle da Malária do Ministério da Saúde de Angola é responsável pela distribuição de redes mosquiteiras e outros bens para cada residência depois que elas forem entregues nos armazéns da ANGOMÉDICA em Benguela pela parte Japonesa.

7-4. O Governo de Angola confirmou que as redes mosquiteiras entregues pelo Governo do Japão serão distribuídas para mulheres grávidas e crianças com menos de cinco anos de idade gratuitamente exclusivamente nas unidades sanitárias.

7-5. O Governo de Angola comprometeu-se a realizar o registo e gestão dos resultados da distribuição e submeter um relatório de monitoramento à Embaixada do Japão no Zimbabwe um ano depois que os bens tenham sido entregues em Angola.

7-6. O Governo de Angola solicitou que todas as redes mosquiteiras sejam do tipo "Long Lasting Insecticidal Nets" (LLIN) e a Equipa confirmou a sua adequabilidade.

7-7. Ambas as partes confirmaram que os bens a serem entregues no Projecto não deverão duplicar os bens a serem entregues sob os auspícios do projecto da GFATM (Global Fund to fight AIDS, Tuberculosis and Malaria) em termos de área de distribuição, rota e objecto.

7-8. O Governo de Angola informará o conteúdo da política de medicamentos anti-maláricos definitiva até dezembro de 2004 para a parte Japonesa através do escritório da JICA no Zimbabwe. O conteúdo da lista de equipamentos e materiais deverá ser revista conforme a política de medicamentos em caso necessário.

7-9. O Ministério da Saúde vai promover junto das autoridades competentes a isenção dos expatriados Japoneses engajados no Projecto de todas as obrigações e taxas fiscais relacionadas que possam ser impostas em Angola com respeito à importação de produtos e serviços fornecidos sob o contracto verificado.

Anexo 1

List of Equipment

No	Name of item	Quantity			Priority
		Phase I	Phase II		
1	Long Lasting Insecticidal Net (LLIN)	144,000	97,000	pcs	A
2	Rapid Diagnostic Test	134,000	137,000	tests	A
3	Reagent kit	49	49	kits	A
4	Binocular Microscope	29	0	units	A
5	Multi-Viewing Microscope	1	0	unit	A
6	Amodiaquine + Artesunate	160,000	164,000	packs	A
7	Sulfadoxine-pyrimethamine	435,000	446,000	tab	A
8	Quinine (tablet)	202,000	207,000	tab	A
9	Quinine (injection)	29,000	30,000	amp	A
10	Artemether (injection)	5,000	5,000	amp	A
11	Infusion set	29,000	30,000	sets	A
12	Desk Top Computer with Printer	10	0	units	A
13	Motorcycle	11	0	units	A
14	W-cabin Pick-up Truck	3	0	units	A
15	Larviside (Bactived)	10	0	ton	B
16	Larviside (Griselef)	10	0	ton	B
17	Larviside (Larvex 100)	10	0	ton	B
18	Sprayer for Larviside	10	0	units	B
19	Sprayer for Indoor house sparying	20	0	units	B
20	Entomology equipment kit	10	0	kits	B

ANEXO-2: ESQUEMA DE COOPERAÇÃO FINANCEIRA NÃO-REEMBONSÁVEL DO JAPÃO

1. Procedimentos para a Cooperação Financeira Não-Reembolsável

1) O Programa de Cooperação Financeira Não-Reembolsável é executado conforme os seguintes procedimentos.
Solicitação (Solicitação feita pelo país recipiente)
Estudo (Estudo do Desenho Básico realizado pela JICA)
Avaliação e Aprovação (Avaliação pelo Governo do Japão e Aprovação pelo Gabinete do Governo do Japão)
Determinação da Implementação (As Notas trocadas entre os Governos do Japão e do país recipiente)

2) Primeiramente, a solicitação para a Cooperação Financeira Não-Reembolsável feita por um país recipiente é examinada pelo Governo do Japão (o Ministério de Negócios Estrangeiros) para determinar se ela é elegível ou não para a Cooperação Financeira Não-Reembolsável. Se a solicitação for considerada apropriada, o Governo do Japão indica a JICA para conduzir um estudo sobre a solicitação. Se necessário, a JICA envia uma Equipa de Estudo Preliminar para o país recipiente para confirmar o conteúdo da solicitação.

Em segundo, a JICA conduz o estudo (Estudo do Desenho Básico), usando empresas de consultoria Japonesas.

Em terceiro, o Governo do Japão avalia o projecto para decidir se ele é ou não adequado para o Programa de Cooperação Financeira Não-Reembolsável do Japão, baseado no relatório do Estudo do Desenho Básico preparado pela JICA, e os resultados são então submetidos ao Gabinete do Governo do Japão para aprovação.

Em quarto, o projecto, uma vez aprovado pelo Gabinete, é oficializado com a Troca de Notas assinada pelos Governos do Japão e do país recipiente.

Finalmente, para a implementação do projecto, a JICA apoia o país recipiente no preparo de concurso público, contratos e outros.

2. Estudo do Desenho Básico

1) Conteúdo do Estudo
O objectivo do Estudo do Desenho Básico (doravante a ser referido como "o Estudo") conduzido pela JICA para um projecto solicitado (doravante a ser referido como "o Projecto"), é fornecer um documento básico necessário para a apreciação do Projecto pelo Governo do Japão. O conteúdo do Estudo é como se segue:
   a) confirmação do antecedentes, objectivos e benefícios do Projecto assim como a capacidade institucional dos organismos relacionados do país recipiente, necessários para a implementação do Projecto;

b) avaliação da adequabilidade do Projecto a ser implementado através do esquema de Cooperação Financeira Não-Reembolsável dos pontos de vista técnico, social e econômico;
c) confirmação dos itens concordados entre ambas as partes com relação as componentes básicas do Projecto;
d) preparação de um desenho básico do Projecto; e
e) estimativa de custos do Projecto.

O conteúdo da solicitação original não é necessariamente aprovado em sua forma inicial como projecto de Cooperação Financeira Não-Reembolsável. O Desenho Básico do Projecto é confirmado considerando-se as directrizes básicas do esquema de Cooperação Financeira Não-Reembolsável do Japão.

O governo do Japão solicita ao Governo do país recipiente para que tome todas as medidas necessárias para assegurar a sua auto-ajuda na implementação do Projecto. Tais medidas devem ser asseguradas mesmo que estejam fora da jurisdição do organismo do país recipiente responsável pela implementação do Projecto. Portanto, a implementação do Projecto é confirmada por todos os organismos relacionados do país recipiente através das Actas das Discussões.

2) Seleção de Consultores

Para o bom andamento na implementação do Estudo, a JICA usa uma empresa de consultoria selecionada através de procedimentos próprios (concorrência pública). A empresa selecionada participa do Estudo e prepara um relatório baseado nos termos de referência estipulados pela JICA.

No início da implementação do Projecto depois da Troca de Notas (E/N), para os serviços de Desenho Detalhado do Projecto, a JICA recomenda que a mesma empresa de consultoria que participou no Estudo para o país recipiente seja contratada, a fim de se manter a consistência técnica entre o Desenho Básico e o Desenho Detalhado, assim como para evitar qualquer atraso injustificado causado pela seleção de uma nova empresa de consultoria.

3. Esquema de Cooperação Financeira Não-Reembolsável

1) O que é Cooperação Financeira Não-Reembolsável ?
O Programa de Cooperação Financeira Não-Reembolsável fornece ao país recipiente fundos não-reembolsáveis para a entrega de estruturas, equipamentos e serviços (serviços de engenharia e transporte de produtos, etc.) para o desenvolvimento econômico e social do país sob princípios e em conformidade com as leis e regulamentos relevantes do Japão. A Cooperação Financeira Não-Reembolsável não é fornecida através da doação de materiais.

2) Troca de Notas (E/N=Exchange of Notes)
A Cooperação Financeira Não-Reembolsável é realizada conforme as Notas trocadas pelos dois Governos relacionados, no qual o objectivos do projecto, período de execução, condições e valor da Cooperação Financeira Não-Reembolsável, etc., são confirmados.

3) "O período da Cooperação" corresponde a um ano fiscal aprovado pelo Gabinete do Governo do

Japão. Neste ano fiscal, todos os procedimentos tais como a troca de Notas, contratação de empresa de consultoria e empreiteiras e seus respectivos pagamentos devem ser realizados.
Contudo, em caso de atrasos na entrega, instalação ou construção devido a fatores imprevisíveis tais como o motivos metereológicos, o período de Cooperação pode ser prorrogado por um período de no máximo um anfo fiscal mediante acordo mútuo entre os dois Governos.

4) Na Cooperação Financeira Não-Reembolsável, em princípio devem ser adquiridos produtos e serviços, inclusive o transporte, Japoneses ou do país recipiente.
Quando os dois Governos considerarem necessário, a Cooperação Financeira Não-Reembolsável pode ser usada para adquirir produtos ou serviços de um terceiro país.

Contudo, os contratados primários, nomeadamente as empresas de consultoria, de construção e de provisão devem ser limitadas a "nacionais Japoneses". (O termo "nacionais Japoneses" significa pessoas de nacionalidade Japonesa ou empresas Japonesas controladas por pessoas de nacionalidade Japonesa.)

5) Necessidade de Verificação
O Governo do país recipiente ou sua autoridade designada concluirá os contratos em Ienes Japoneses com nacionais Japoneses. Estes contratos serão verificados pelo Governo do Japão. Esta "verificação" é considerada necessária para assegurar a transparência junto ao contribuinte japonês.

6) Incumbências do Governo do país recipiente
a) assegurar a pronta descarga e desembaraço nos portos de desembarque no país recipiente e transporte doméstico dos produtos entregues sob a Cooperação Financeira Não-Reembolsável;
b) isentar os expatriados Japoneses dos impostos aduaneiros, taxas domésticas e tarifas fiscais que possam ser impostos no país recipeinte com relação ao fornecimento de produtos e serviços sob os contratos verificados;
c) assistir aos expatriados Japoneses cujos serviços sejam necessários em conexão com o fornecimento de produtos e serviços dos contratos verificados, tais como estruturas que possam ser necessárias para a sua entrada e permanência no país recipiente para a execução de seu trabalho;
d) assegurar que os produtos adquiridos na Cooperação Financeira Não-Reembolsável sejam mantidas e utilizadas apropriadamente e de modo efetivo para o Projecto; e
e) se responsabilizar por todos os custos necessários para o Projecto que não sejam cobertos pela Cooperação Financeira Não-Reembolsável.

7) "Uso Apropriado"
O país recipiente deve manter e utilizar o equipamento adquirido sob a Cooperação Financeira Não-Reembolsável apropriadamente e de modo efetivo e alocar os quadros necessários para a operação e manutenção dos mesmos, assim como se responsabilizar por todos os custos que não estejam cobertos pela Cooperação Financeira Não-Reembolsável.

8) "Re-exportação"
Os produtos adquiridos sob a Cooperação Financeira Não-Reembolsável não devem ser re-exportados do país recipiente.

9) Arranjo Bancário (B/A)

a) O Governo do país recipiente ou a autoridade por ele designado deve abrir uma conta bancária em nome do Governo do país recipiente em um banco autorizado para transações internacionais no Japão (doravante a ser referido como "o Banco"). O Governo do Japão executará a Cooperação Financeira Não-Reembolsável realizando os pagamentos em Iene Japonês para cobrir os encargos contraídos pelo Governo do país recipiente ou pela autoridade por ele designada sob os contratos verificados.

b) Os pagamentos devem ser feitos quando as solicitações de pagamento forem apresentadas pelo Banco ao Governo do Japão mediante uma Autorização de Pagamento (A/P) expedida pelo Governo do país recipiente ou a autoridade por ele designada.

ANEXO 3 Principais Incumbências de Cada Governo

Nº	Itens	A ser coberto pela Cooperação	A ser coberto pelo Governo Contrapartidário
1	Arcar com o pagamento de comissões ao banco Japonês referentes aos serviços referentes à Autorização de Pagamento (A/P)		
1) Comissão de consultoria de A/P			☐
2) Comissão de pagamento			☐
2	Assegurar o descarregamento e desembaraço aduaneiro no porto de desembarque do país beneficiário		
1) Frete marítimo(aéreo) de produtos do Japão ao país beneficiário		☐	
2) Isenção de direitos alfandegários e taxas de desembaraço aduaneiro aos produtos constantes do Projecto			☐
3) Transporte doméstico do porto de desembarque aos sítios de Projecto		☐	
3	Conceder aos nacionais Japoneses, cujos serviços serão requeridos na provisão de produtos e nos trabalhos constantes do termo de contracto, as facilidades para a entrada e estadia no país beneficiário		☐
4	Isentar os nacionais japoneses dos direitos alfandegários, impostos domésticos e outros encargos que possam ser-lhes impostos pelo país beneficiário, quando da provisão de produtos e serviços constantes do termo de contracto.		☐
5	Manter e utilizar adequadamente e eficientemente as instalações e os equipamentos fornecidos através da Cooperação Financeira Não- Reembolsável		☐
6	Arcar com todas as despesas de construção de instalações, bem como as de transporte e instalação de equipamentos, que não sejam cobertas pela Cooperação Financeira Não-Reembolsável.		☐