

STUDY REPORT

ON

**THE PROJECT FOR REINFORCEMENT
OF MATERNAL AND CHILD HEALTH**

(GRANT AID FOR CHILD WELFARE)

IN

THE REPUBLIC OF CENTRAL AFRICA

MARCH 2001

Japan International Cooperation Agency (JICA)

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PREFACE

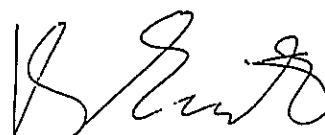
In response to a request from the Government of Central African Republic, the Government of Japan decided to conduct a basic design study on the Project for Reinforcement of Maternal and Child Health and entrusted the Japan International Cooperation Agency (JICA) to conduct the study with the assistance of the Japan International Cooperation System (JICS).

JICA sent to Central Africa a study team from October 14th to November 15th, 2000.

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

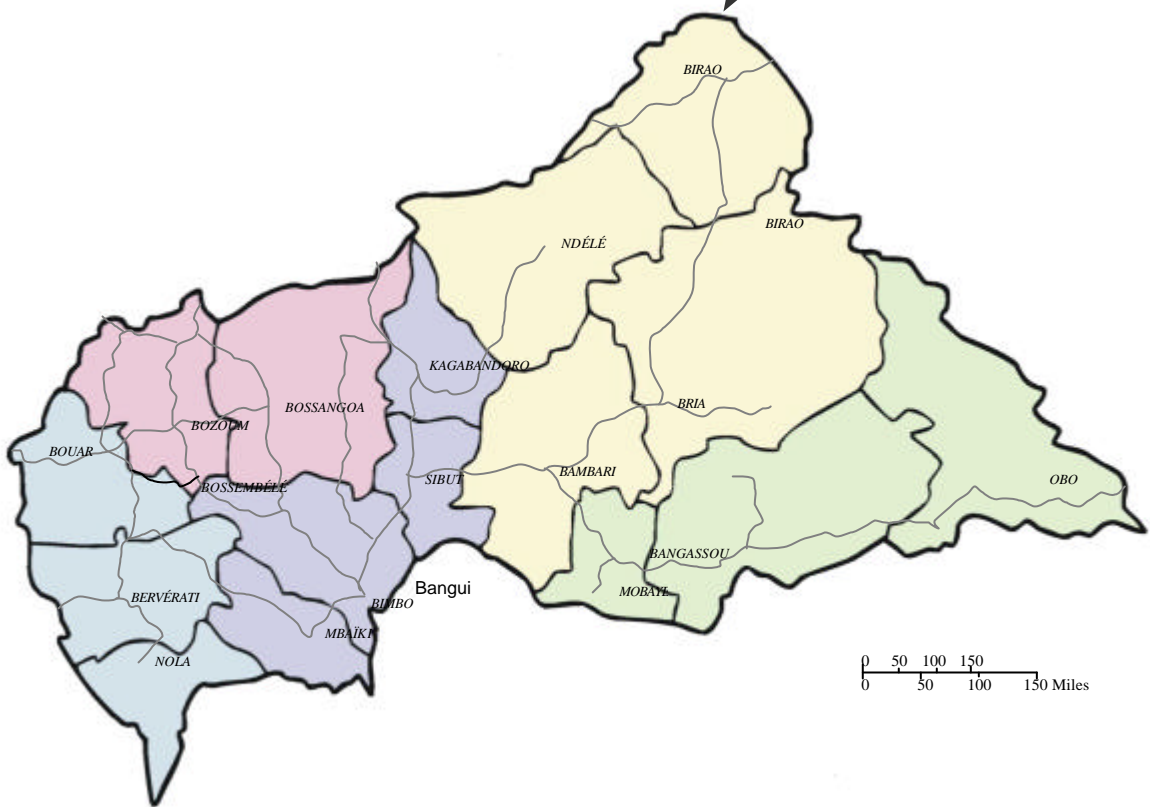
I wish to express my sincere appreciation to the officials concerned of the Government of Central African Republic for their close cooperation extended to the team.

March 2001



Kunihiko Saito
President

Japan International Cooperation Agency



Health Administrative District	グフィビンギ GFIBINGUI	ケモグリビンギ KEMO - GRIBINGUI	オンベラムボコ OMBELLA - MPOKO	ロバイエ LOBAYE
Health Administrative District II	サンガ SANGHA	オートサンガ HAUTE - SANGHA	ナナムンベレ NANAMAMBERE	
Health Administrative District	オウナムペンデ OUHAM - PENDE	オウナム OUHAM		
Health Administrative District	バミンギ・バンゴラン BAMINGUI - BANGORAN	ヴァカガ VAKAGA	オウカ OUAKA	オートコット HAUTE KOTTO
Health Administrative District	バスコット BASSE - KOTTO	ムボモウ MBOMOU	オート・ムボモウ HAUT - MBOMOU	

Map of Central African Republic

Abbreviations

BCG:	Bacillus Calmette-Guérin
Canada-Cida:	Canadian International Development Agency: CIDA
CBM:	NGO:Christoffel de Mission
DOTS :	Directly Observed Treatment, Short-course
E/N:	Exchange of Notes between Japan and Central Africa for implementing the Project
EU:	European Unions
FAO:	Food and Agriculture Organization of the United Nations
GTZ:	Deutsche Gesellschaft für Technische Zusammenarbeit
WHO:	World Health Organization
IMF:	International Monetary Fund
NGO:	Non Governmental Organization
NIDs:	National Immunization Days
ONU-Sida:	United Nation AIDS Organization
PNDS:	Plan National de Développement Sanitarie 1994-1998
UNDP:	United nation Development Programme
UNFPA:	United Nations Population Fund
UNICEF:	United Nations Children's Fund
USAID:	Agency for International Development
WB:	World Bank

Chapter 1. Background of the Project

The infant mortality rate in Central Africa is still relatively high at 97 deaths per 1,000 infants (approximately 10%) in comparison with other sub-Saharan nations (ex. Senegal: 60 per 1,000, Ivory Coast: 84 per 1,000). The primary factors in this high rate are diseases such as malaria, tuberculosis, poliomyelitis, measles, neonatal tetanus, and yellow fever. Among these, a high rate of both infants and pregnant women contract malaria, while tuberculosis is closely related to AIDS, and as the number of AIDS patients rapidly rises, there is a correspondingly sharp increase in terminal-stage complications. For this reason, the government of Central Africa has been implementing projects to eradicate malaria since 1986, and to combat AIDS and tuberculosis since 1996, with assistance from overseas aid organizations (UNICEF and the government of France etc.), but these programs have not been as successful as hoped.

In terms of immunization measures designed to prevent poliomyelitis, measles, and other diseases, the government of Japan has been providing specialized materials to combat sickness and has been providing various types of vaccines (BCG, DPT, poliomyelitis, yellow fever, measles, tetanus, and others) as well as cold-chain equipment. The immunization rate is still only between 30% and 55%, necessitating the ongoing implementation of planning in order to boost the rate.

Given these circumstances, in December 1999 the government of Central Africa implemented Project for Malaria and Tuberculosis Prevention, and in June 2000 Project for Expansion of Immunization. In October of that year, Project for Reinforcement of Maternal and Child Health and Combating Sickness was formulated, and a request was made to Japan to provide grant aid in order to procure basic medical care supplies and testing supplies, mosquito net, cold-chain equipment, transportation and communication materials, and other items.

Chapter 2. Contents of the Project

2-1. Basic Concept of the Project

The objective of the Project is to effect quantitative improvements in the medical care and health services provided to the citizens of Central Africa in four areas by the Central African Ministry of Health, which are 1) measures against malaria, 2) measures against tuberculosis, 3) broadening the scope of immunization planning, and 4) strengthening maternal and child health care. The Project will achieve these objectives by providing the necessary supplies and materials required for health development planning, including basic medical care supplies and testing supplies, transportation and communication materials, and general office supplies to the various medical facilities (prefectural hospitals, regional hospitals, and others).

The Project will contribute to *le Plan Intérimaire de Santé 2000-2002* as it did to *le Plan National de Développement Sanitaire 1994-1998*.

2-2. Basic Design of the Requested Japanese Assistance

2-2-1. Design Policy

Currently, the economy of Central Africa is facing critical financial circumstances and numerous medical institutions and related facilities rely on overseas aid organizations for assistance with running and maintaining the facilities, with immediate prospects for financial recovery being bleak. Because of this, the Government of Japan determined, as a result of the study and careful consideration of the scale of the request from the government of Central Africa, to minimize the burden of maintenance management costs on the Central African side when implementing the Project. And also to select supplies and materials appropriate to the infrastructure of the country. Additionally, the circumstances of medical facilities, such as the overall restructuring of existing facilities or establishment of new facilities are not accurately grasped. In particular, there is the lack of accurate information concerning regional hospitals, which are at the bottom of the medical service in Central Africa. Refurbishing is targeted only on medical facilities for which a final destination is ascertained.

Furthermore, the government of Central Africa requested that, when materials and

supplies are provided, computers, videos, OHPs, and other audio-visual materials be introduced in the field of immunization measures and maternal and child health, as a part of the short-term technical assistance by the consultant. This was a strong request on the part of the government of Central Africa, and it was decided to include these materials in the Project.

In addition, because the Project targets a large volume of materials and supplies, and because the infrastructure, including elements such as roads, is not yet sufficient to support the scale of the Project, it will be difficult to confirm that the materials and supplies have reached their ultimate destinations (prefectural hospitals and regional hospitals) in a timely fashion within the E/N limit. Consequently, in addition to the technical assistance described above, a proposal was made that it would be necessary to monitor whether or not materials and supplies were reaching their destinations, and to ensure they were being used effectively, and the government of Central Africa agreed with the necessity for such monitoring.

The basic policy taking all of these elements into consideration is as described below.

1) Field of prevention and treatment of malaria

With respect to the request for mosquito net with insecticide which was among the principal requested items, the initial request was for a large volume of 120,000 mosquito nets for nationwide distribution. Distributing such a large volume of mosquito net would place a heavy burden on Central Africa in terms of expenses and preparation, and it would be difficult for the Ministry of Health to find sufficient budgetary means and means of implementation to meet this burden, given its current financial resources and organizational structure. Also, Central Africa does not have past experience in the distribution of mosquito net for the time being, and the Ministry of Health only has plans to implement such a pilot project at some point in the future, under the supervision and guidance of UNICEF. Although there is a strong need for mosquito net with insecticide, the government of Central Africa is not yet able to assure the necessary personnel, activities funding, administration of collateral funding, and other facets of the organization required in order to implement the undertaking, therefore the distribution of mosquito net with insecticide was eliminated from the Project.

Moreover, the government of Central Africa asked the Government of Japan to assume the relevant expenses for instructional activities and personnel education and training,

but because such expenses would not fall within the scope of grant aid, they were also eliminated from the Project.

With regard to transportation means such as cars and motorcycles, a similar request was made in the area of immunization measures, described below in 3), so the Japanese side recommended to utilize the same vehicles in both areas of activity.

2) Measures against tuberculosis

As part of the Project, the Government of Central Africa requested a one-year supply of anti-tuberculosis drugs such as rifampin, pyrazinamide, streptomycin, ethambutol, and isoniazid.

In Central Africa, there are few facilities adopting the DOTS (Directly Observed Treatment, Short-course) method recommended by WHO that allows for direct monitoring by hospital-related personnel of anti-tuberculosis drugs administered to patients, and even those using the system are using it only on an experimental basis. The Government of France until 1999 had supplied anti-tuberculosis drugs. The Government of France did not supply anti-tuberculosis drugs for 2000, however according to officials in the Government of Central Africa involved in efforts to fight tuberculosis, the EU has been supplying such drugs on an ongoing basis. For this reason, even if a single shipment of a year's supply of anti-tuberculosis drugs was provided, it would not make a significant contribution in this area. Conversely, there is an undeniable possibility that such a move would confuse the efforts being carried out between Central Africa and the governments of France and the EU to establish an organizational structure to treat tuberculosis. Therefore, anti-tuberculosis drugs were eliminated from the Project, along with the syringes that would have been used to inject the anti-tuberculosis drugs. However, other testing-related equipment such as microscope was included in the Project.

3) Expansion of Immunization Program

Since 1993, Japan has been providing support in this area to prevent and treat infectious diseases, and has provided vaccines and cold-chain equipment for transporting them, as well as vehicles and other items. At the same time, however, the available cold chain facilities are not yet sufficient to implement immunization programs throughout the entire country, and among existing facilities, a high number were established a fairly long time ago and have deteriorated to a significant degree. Therefore, in the Project,

vaccines and the cold-chain equipment will be refurbished in order to support and supplement equipment supplied by the government of Japan to fight infectious diseases. Vaccines, in particular, will be provided in the amount used for regular preventive inoculations (the routine volume) in 2000, along with the equipment (such as syringes) needed to administer the vaccines.

Of the requested materials and supplies, with regard to solar-type refrigerated warehouses and wireless broadcast equipment requiring installation, there are security problems at the locations where the Government of Central Africa has requested their installation, and it was necessary to narrow the focus of the targeted items. A request was also made for cellular telephones as a means of communication, but it is feared that they would be used for purposes outside the scope of the Project, and the communication situation in neighboring areas is unclear, so it would be difficult to predict the efficacy of providing cellular telephones. Therefore, the Japanese side decided that they are not an appropriate item to be supplied, and were eliminated from the Project. Ordinary trucks introduced through support provided by the Government of Japan are being used to transport vaccines from metropolitan cities to rural areas. Cold boxes are being used to transport the vaccines over long distances on hot days, and there is a strong threat of the vaccines being damaged or spoiled as the temperatures rise. For this reason, from the standpoint of transporting vaccines safely and without accident, there is a strong need to refurbish the refrigerated trucks, and such trucks will be procured as part of the Project.

4) Maternal and child health

Deliveries at medical institutions in Central Africa are taking place primarily at facilities where the overall level of equipment is low, and the equipment has severely deteriorated. Not only that, but despite the fact that many deliveries take place at night, oil lamps and candles are used for illumination at medical facilities except for those in Bangui, and there is a strong need for illumination devices that run on electricity at medical facilities. Because of this, materials and supplies were selected focusing primarily on those needed for deliveries, and it was also decided to provide compact portable illumination devices equipped with generators. Additionally, at prefectural hospitals and regional hospitals which are the central medical institutions in rural cities, beds have severely deteriorated, and are in short supply at many facilities. For this reason, hospital beds will be provided at medical facilities at all levels (prefectural and regional levels).

5) Technical assistance (Soft-Component)

In Central Africa, there is no systematic organization of health and medical statistics or related information, and no specialized sections or divisions devoted to the management of medical data, so obtaining health information is difficult even within the Ministry of Health. Currently, experts are being dispatched by the Government of France, and are attempting to organize medical data. On the other hand, while computers are being used to some extent in Central Africa, insufficient knowledge of operation methods and maintenance makes it extremely difficult to organize and manage information effectively, and measures to combat computer viruses are not available. These problems are a significant factor in the reason of the delay in the organization of medical-related information.

In order to supplement the operation and maintenance control of the electronic office equipment being provided through the Project, a technical assistance (provision of a data processing environment) encompassing computerized methods of organizing information, including anti-virus measures, maintenance and other aspects is needed.

Additionally, with respect to the instructional activities and educational activities targeting citizens that are also being carried out in the areas of immunization measures and of strengthening maternal and child health, activities are currently being carried out with materials and documents provided by UNICEF. However, materials and supplies for instructional and educational activities are insufficient, and there has been very few accumulation of know-how or software, therefore these activities need to be strengthened. After the materials and supplies planned for procurement as part of the Project have been handed over to the Central African side, a technical assistance (provision of audio-visual educational materials) will be needed to support the activities described above in these areas.

6) Monitoring

Six months after the materials and supplies involved in the Project have been transferred to Central Africa, two inspectors will be dispatched to monitor the organization of materials and supplies targeted by the Project, operation and maintenance control at the various hospitals, and the beneficial efficacy of the Project implementation. In addition, these personnel will confirm the results of the technical assistance.

2-2-2. Basic Plan

1) Measures against malaria

A) Testing materials and supplies (microscopes, blood sugar analyzers, glass slides, pipettes, beakers, reagents, etc.)

Microscopes and other testing-related equipment will be provided in the necessary and appropriate quantities to 16 prefectural hospitals designated as targets of the Project, as well as to the Malaria Countermeasures Laboratory (three teams involved in entomological programs) at the Ministry of Health. Of these supplies, 85 sets of graduated measuring cylinders (five sets to each prefectural hospital and five sets to the Ministry of Health) have been requested, but given the number of testing personnel at the prefectural hospitals (approximately two engineers), 37 sets (two sets to each prefectural hospital and five sets to the Ministry of Health) will be provided.

B) Office equipment (computers, copy machines, organizational shelves, etc.)

Computers and copy machines will be provided to the Malaria Countermeasures Team and to laboratories under its direct control, with one computer and one copy machine being provided to each facility. Three simple-style beds (folding types) will be provided to each regional facility as part of the entomological studies (including malaria) and educational activities being carried out at those facilities.

2) Measures against tuberculosis

A) Basic medical-care equipment (stethoscopes, sphygmomanometers, IV stands, syringes, etc.)

Regional hospitals where existing equipment is currently in a state of severe deterioration, or is insufficient or does not exist at all, will be targeted to receive this equipment, which will be distributed in the necessary and appropriate quantities.

Of the above equipment, the initial request included 60 scales (one each for 60 regional hospitals) and 50 stethoscopes (one each for 50 regional hospitals), but because the final destination is unclear in some of these cases, the Project targets hospitals for which the name of the hospital can be verified, and for which the surrounding area has a relatively large population. As a result, 47 of each instrument (one of each to each of 47 regional hospital facilities) will be distributed.

B) Reagents

The facilities targeted for refurbishment include medical facilities throughout Central Africa, and reagents will be procured in the necessary and appropriate quantities. However, management of procured reagents such as alcohol and the Tuberculosis Countermeasures Team of the Ministry of Health will supervise consumable items such as Styrofoam cups, and these reagents will be distributed in response to orders placed by the various facilities.

3) Expansion of Immunization Program

A) Cold chain equipment

The facilities targeted for refurbishment include the team handling immunizations at the Ministry of Health, prefectural hospitals and regional hospitals, with the following being provided at each facility where the equipment has severely deteriorated, or does not exist at all: refrigerated warehouses and refrigerated trucks (34), cold boxes (20), large-sized vaccine carriers (17), and vaccine carriers (15). Of these, one solar-type refrigeration and freezer warehouse will be provided at a site (Bossembélé) at which safety can be assured, and from which the metropolis of Bangui can be accessed relatively easily.

B) Cars and motorcycles

Facilities that do not currently have cars will be targeted for provision of cars, and one each will be provided to the team handling prevention of infectious diseases at the Ministry of Health, and to four prefectural hospitals (Mbaiki, Sibut, Bossangoa, and Bozoum). Motorcycles will be provided to hospitals that do not currently own any, and will be distributed to prefectural hospitals in areas with relatively large populations (Kagabandoro) and regional hospitals (at 22 locations). Two refrigerated vehicles will be provided to the Central Immunization Team.

C) Communications equipment

Prefectural hospitals and regional hospitals will be targeted for this equipment, and one device will be provided at each facility where existing equipment has severely deteriorated or does not exist (a total of ten facilities). However, installation construction is planned as part of the incidental operations, and only those facilities at which installation construction is feasible in terms of time and physical properties will be selected.

D) Office equipment (computers, copy machines, OHP, etc.)

The Immunization Team of the Ministry of Health will be targeted to receive equipment, with two desktop computers being provided to replace and supplement existing equipment. However, because seminars are frequently held at regional locations, one laptop computer will also be provided for business trip purposes. In conjunction with this, one copy machine and one generator to be used as a power source (for use at seminars held at regional locations and other purposes) will also be provided.

E) Vaccines and related equipment

The quantities of vaccines estimated for implementation in 2001 are as follows: BCG vaccine: 255,600 doses (20 doses/vial), Diphtheria, Pertussis and Tetanus Toxoid vaccine (DPT): 500,000 doses (10 doses/vial), Oral Poliomyelitis Vaccine (OPV): 664,520 doses (10 doses/vial), Measles vaccine: 166,130 doses (10 doses/vial), Yellow Fever vaccine: 166,130 doses (10 doses/vial), and Tetanus Toxoid vaccine: 338,000 doses (10 doses/vial).

Except for the Tetanus Toxoid vaccine, the population targeted for vaccination consists of infants less than one year of age (127,791 infants). Given a damage and loss rate¹ of 50% for BCG and of 30% for OPV, DPT, measles, and yellow fever vaccines, it has been decided to procure enough vaccines to inoculate 80% of the target population, along with an emergency supply of 25% to be kept in storage. The Tetanus Toxoid vaccine will be used for expectant and nursing mothers, with a target population of 130,000, and the other vaccines will be procured in the same proportions.

In other equipment, auto-disable syringes² will be procured in the following quantities: 0.05 ml syringes for BCG vaccinations, 0.5 ml syringes for DPT, measles, yellow fever, and tetanus vaccinations, and 5 ml syringes for diluted vaccinations, along with safety boxes to be used for disposal of the vaccine inoculation syringes following use. The quantity of auto-disable syringes will be supplemented in an amount equal to 10% of the targeted population, to compensate for the syringes which are assumed to be

¹ Damage and loss rate: This refers to the amount of vaccine lost because of temperature increases during transportation and inadequate management, as well as freeze-dried vaccines that are no longer usable after being diluted because only a given number of people can be vaccinated within the usable period of time. For example, assuming 20 doses per vial, if only five people are vaccinated, the amount for the other 15 people will no longer be usable.

² Auto-disable syringes: These are designed so that a fixed amount of fluid is drawn into the syringe, and after the fluid has been injected, an internal metal stopper is activated to completely prevent re-use of the syringe.

damaged due to problems when they are used. Thus, a total of 140,600 0.05 ml syringes for BCG inoculations will be procured, along with 988,900 0.5 ml syringes for DPT, measles, yellow fever, and tetanus inoculations. Syringes for diluted vaccinations will be used when the diluted toxoid vaccines provided in freeze-dried form are used (BCG, measles, and yellow fever). Because one vial of each is used in these injections, a total of 46,100 syringes will be procured, corresponding to the total number of toxoid vaccine vials. The safety boxes used for disposal of auto-disable syringes following use of the vaccine can accommodate approximately 100 syringes, so a quantity of 11,300 safety boxes will be procured, which is 1/100 the total number of syringes.

4) Maternal and child health

A) Materials and supplies for maternal and child health (examination tables, delivery tables, Caesarian section instruments, scales, and other gynecological and obstetrical supplies)

Four state-run hospitals in the metropolis of Bangui (Communauté Hospital, Amitié Hospital, University Hospital, and Children's Hospital) are targeted to receive supplies and equipment, along with prefectural and regional hospitals. Materials and supplies will be provided in the necessary and appropriate quantities to facilities that require updating of existing equipment, or new equipment. Of the equipment noted above, 20 sets of surgical instruments for Caesarian sections (two sets for each of four prefectural hospitals and one set for each of 12 regional hospitals) have been requested, but given the scale of the operating rooms and staff at the prefectural hospitals, it was decided that 16 sets (one set for each of 16 prefectural hospitals) would be provided.

Also, 1,510 sets of IV stands (ten sets for each of 16 prefectural hospitals and five sets for each of 270 regional hospitals) were requested, but because the hospital names cannot be verified for some of the regional hospitals, it was decided to provide a total of 1,490 sets (400 sets for each of 4 state-run hospitals, ten sets for each of 16 prefectural hospitals and five sets for each of 154 regional hospitals), the 154 regional hospitals being those for which the final destination could be definitely confirmed. The request also included 270 bicycles (one each for 270 regional hospitals), but again, only those hospitals for which the hospital name could be definitely verified were targeted to receive equipment, so 191 bicycles (one each for 191 regional hospitals) will be procured.

B) Audio-visual equipment (TVs, tape recorders, slide projectors and OHPs)

The Maternal and Child Health team of the Ministry of Health is targeted to receive equipment, and because TVs, video players, generators, and slide projectors are used for seminars, one of each will be procured. Tape recorders and OHPs are used for publicity purposes and by members of the team who are dispatched to conduct educational activities in regional areas, so five tape recorders and two OHPs will be procured.

C) Beds and mattresses

Four state-run hospitals in the metropolis of Bangui are targeted to receive supplies and equipment, along with prefectural and regional hospitals. A total of 400 beds will be provided to the state-run hospitals, 390 to prefectural hospitals, and 2,010 to regional hospitals (the beds will be fitted with mosquito net with insecticide). The mattresses provided for the beds will have synthetic resin surfaces that can be easily cleaned and disinfected, and the specifications will be such that the mattresses cannot be easily detached from the beds, to prevent theft.

Section 2-2-3, "Implementation Plan", shows the destinations of the various materials and equipment to be procured by the Japanese side under the auspices of the Project.

Table 1. Scale and Content of Supplies

(a) Measures against malaria

No.	Material/supply	Specifications	Qty.	Application
1	Binocular biological microscopes	Binocular mirror-type, mechanical stage, eyepiece lens 10x, objective lens 4x, 10x, 40x, 100x	21	Verification of malaria protozoa in the blood, and other microscopic examinations
2	Staining bats	Glass, vertical type, 15 in set, with stainless steel basket	36	Staining of specimens (blood applied to slides)
3	Preparation boxes	Plastic, 100 in set	36	Drying and temporary storage of specimens following staining
4	Blood cell counters	Dual type, vertical	18	Counting of blood cells and malaria protozoa in blood
5	Timers	Analog manual type, 60-min., plastic	18	Time measurements in staining and other clinical testing
6	Water supply tanks	5-l min., candle-type filter	17	Temporary storage of safe water (such as distilled water) needed for tests
7	Measuring cylinders	1 each of 50, 100, 250, 500, 1000 ml, with safety cap, glass	37	Measuring of chemicals and specimens (blood samples)
8	Pipettes	10 each of 1, 5, 10 ml, scale at tip	17	Same as above
9	Desktop computers + printers	Computer: Pentium, 600 MHz, 64 MB, 10 GB, 17-inch screen, with MS Word, Excel, Access, Norton Anti-Virus. Printer: 8 ppm, A4 size supported	2	Data management and creation/management of reports
10	Copy machines and accessories	17 copies/min. min., with 500-sheet cassette (A5R-A3), zoom 50%-200%	2	Same as above
11	Giemsa Stain Solution (staining fluid)	2.5L	85	Staining of specimens (blood applied to slides)
12	May-Grunwald Solution (staining fluid)	2.5L	85	Same as above
13	Glass slides	50 in set, 76×26×1.0-1.2mm	1700	Creating test samples for microscopic testing
14	Lancets (needles for drawing blood)	250本セット、5.5-6×40mm	320	Drawing blood for tests (also used to create blood samples on slides)
15	Gloves for handling lancets	Latex, 100 in set, L size, disposable	500	Preventing infection of testing personnel
16	Oil immersion fluid	100 ml, viscosity 100 - 155 cm	36	For engineering refraction between 100 x 100 objective lens and specimen
17	Absorbent cotton	1kg, non-sterile	180	Skin disinfection when drawing blood, and disinfecting of test instruments
18	Absorbent cotton (pre-cut)	1kg, non-sterile 3-5×3-5cm	180	Skin disinfection when drawing blood; can also be used to wipe away blood
19	Methylalcohol (90%)	95 proof, 1 liter	200	Cleaning and disinfecting of test instruments
20	Methanol	1L	36	Fixing of specimen staining
21	Gauze	Folded, 30 cm x 10 m min.	36	Stopping blood flow and wiping away blood
22	Desks (with drawers)	With single arm, 1000 (W) x 700 (L) x 700 (H) min., low-backed chair (vinyl leather, with casters)	16	For examination rooms
23	Chairs	No back, 1300 x 450 x 385 mm min.	32	Waiting room chairs
24	Shelves (with drawers)	900 (W) x 360 (L) x 700 mm min., steel	20	Storing medical implements and treatment items
25	Simple-type beds (folding type)	W600×L1800×H340mm, canvas	3	Regional business trips by Ministry of Health staff
26	Entomological magnifying glasses	Magnifying microscope type, magnification 10x, 20x	4	For on-site examination for malaria-carrying mosquitoes and parasitic insects

(b) Measures against tuberculosis

No.	Material/supply	Specifications	Qty.	Application
27	Microscopes	Binocular mirror-type, mechanical stage, eyepiece lens 10x, objective lens 4x, 10x, 40x, 100x	24	Monitoring for presence of tuberculosis bacilli in smear testing, and other microscopic testing
28	Scales (adult)	Analog, measurement range: at least up to 150 kg, scale degrees: 1,000 g max.	47	Weighing patients
29	Stethoscopes	Double, internal spring type, stainless steel head	47	Patient diagnosis
30	Desktop computers + printers	Computer: Pentium, 600 MHz, 64 MB, 10 GB, 17-inch screen, with MS Word, Excel, Access, Norton Anti-Virus. Printer: 8 ppm, A4 size supported	1	To create records of patients and keep accounts of treatment, and for data management
31	Copy machines	17 copies/min. min., with 500-sheet cassette (A5R-A3), zoom 50%-200%	1	Same as above
32	Staining fluids and reagents (1 set)	95-proof alcohol, fuchsin, methylene blue, phenol, sulfuric acid, slides, gloves for handling, masks, sodium hypochlorite	1	Staining fluids and reagents for tuberculosis testing
33	Styrofoam cups	Made of styrofoam, 95 cc-150cc	8000	Containers for test agents for smear testing (sputum)

(c) Immunization measures

Material/supply	Specifications	Qty.	Application
Absorption type refrigerator/freezers	Oil/electric type, 55-l refrigerator, 35-l freezer min.	20	Refrigerated/frozen storage of vaccines (using oil)
		10	
Solar-type refrigerator, ice pack freeze	15-l refrigerator min., with 1 system	1	Refrigeration of vaccines, ice pack freezing
Compression-type freezers	172 freezing min.	3	Frozen storage of vaccines (electrical)
Absorption-type freezers	Oil/electric type, 10-l refrigerator min.	20	For ice pack freezing (using electricity and oil)
Refrigeration boxes	20-l min.	20	Low-temperature distribution of vaccines (kept at low temperatures using ice packs)
Large-sized vaccine carriers	2.5L	17	Same as above
Vaccine carriers	1.6 L	15	Same as above
Cars	Double-cabin pickups, diesel, 4-wheel drive	5	Distribution (transportation) of supplies, and for instructional activities
Motorcycles	Offroad, 97 cc-125cc	30	Same as above
Wireless communication devices (transmitters / receivers: antennas, lightning rods + generators)	Broadcasting devices: For mobile and permanent stations, multi-type (1.8-3 MHz/SSB)Generators: Gasoline, output 0.55 kVA	10	Contact between regional hospital organizations and Ministry of Health
Portable household generator	Gasoline engines, approx. 2 kVA , 4-stroke, with 36-m cord reel	1	Power supply for audio-visual equipment used for instructional activities and staff training in areas with no electricity
Overhead projector and screen	OHP (400 W, 3500 lumen min., 285 x 285 mm stage), screen (1800 x 1800 mm with tripod, white), portable	1	For presentations in instructional activities and staff training
Copy machine	17 copies/min. min., with 500-sheet cassette (A5R-A3), zoom 50%-200%	1	To create materials used in instructional activities and staff training
Desktop computers + printers	Computer: Pentium, 600 MHz, 64 MB, 10 GB, 17-inch screen, with MS Word, Excel, Access, Norton Anti-Virus.	2	To create immunization records and for data management
Laptop computer	Computer: Pentium, 600 MHz, 64 MB, 6 GB, 12, 1 TFT screen, with MS Word, Excel, Access, Norton Anti-Virus.	1	To create immunization records in the field
Refrigerated vehicles	3-ton class, freezer container, temperature range of -20°C to +30°C	2	Transportation of vaccines, etc.
Safety boxes	5L	11,300	Same as above
BCG vaccine	20 doses/vial	255,600	Preventive inoculation vaccines
Toxoid vaccine (DTC)	10 doses/vial	500,000	Same as above
Oral poliomyelitis vaccine (routine)	10 doses/vial	664,520	Same as above
Measles vaccine	10 doses/vial	166,130	Same as above
Yellow fever vaccine	10 doses/vial	166,130	Same as above
Tetanus vaccine	10 doses/vial	338,000	Same as above
Syringes + needles (auto-disable: 0.05 ml)	100 per box	140,600	Syringes for vaccines
Syringes + needles (auto-disable: 0.5 ml)	100 per box	988,900	Same as above
Syringes + needles (for dilution: 5 ml)	With 18 G needles	46,100	Same as above

(d) Strengthening of maternal and child health

No.	Material/supply	Specifications	Qty.	Application
61	Examination tables	Steel, Seat 0-20 °, Back rest 0-40 ° adjustable, with siderail, knee clutch, foot step	50	For examination and treatment of pregnant women
62	Delivery tables	Steel, Back rest 0-40 ° adjustable, with foot step	50	For deliveries
63	Surgical instruments for Caesarian section	Set of forceps, needles, cases, etc.	16	For delivery by Caesarean section when natural delivery is not possible
64	Surgical instruments for abdominal operations	Set of forceps, needles, cases, etc.	2	For abdominal operations
65	Sphygmomanometers + stethoscopes	Sphygmomanometers (aneroid type), stethoscopes (double, inner spring, stainless steel head)	121	For measuring heart sounds and blood pressures
66	Traube's rule	Plastic, white	114	Measuring fetal heartbeat (basic amplifying device)
67	Rubber ball for flushing nasal cavity	Rubber, 35 cc min.	114	Suctioning nasal cavities of newborns
68	Scales	Analog, measurement range at least up to 150 kg, scale degrees: 1000 max.	114	Weighing patients
69	Nursing infant scales	Spring-measurement type, measurement range 1.2 kg min.	114	Weighing newborns and nursing infants
70	IV stands	Stainless steel, dual-bag type	1490	IV stands for IV treatment
71	Bedpans	Stainless steel, wedge type	114	For use by expectant and new mothers
72	Vaginal speculae	Large, medium, small	342	For obstetrical examination of pregnant women
73	Kidney Dish	Stainless steel, 250 mm min.	114	Placenta, blood, implements that have been used, and gauze receptacles
74	Suction forceps	Manual vacuum pump type, silicon cup	16	Birth implement, placed against baby's head to apply suction
75	Stainless steel trays (large, medium, small)	Large (330 x 270 x 40 mm), medium (270 x 210 x 140 mm), small (210 x 150 x 140 mm)	342	Laying out instruments before use
76	Round canisters	Large (dia. 330 x 210 mm), medium (dia. 240 x 165 mm), small (dia. 150 x 150 mm), stainless steel	342	Round, anti-bacterial receptacles for gauze and clothing worn during treatment
77	Trays for syringes (square cast)	Stainless steel, 330 x 150 x 65 mm	114	Cylindrical cases used for sterilizing and disinfecting syringes
78	Plastic aprons	Type that fastens in back	342	For physicians and assistants during deliveries
79	Plastic bed covers	Waterproofed, approx. 90-100 cm x 2 m	342	Protection against stains from blood and other fluids on mattresses
80	Examination lamps and generators	Examination lamps, generators (gasoline engines, 0.45 kVA class)	16	For nighttime illumination
81	Lamps	Kerosene, tank of 550-950 cc min., burning time of at least 7 hours	114	Same as above
82	Fingernail brushes	With hooks, 4-5 cm (W) x 10-11 cm (H)	224	For cleaning fingernails of physicians and assistants before handling patients
83	Thermometers	Mercury, made of glass, coated with synthetic resin	342	For taking temperatures
84	Ear speculae	Large, medium, small	5	For examining ears of infants
85	Television	25-inch, with cabinet doors that open in both directions (880 (W) x 1207 x 600 mm)	1	For instructional activities involving maternal and child health, and hygiene education
86	Video deck	Multi-tuner	1	Same as above
87	Tape recorders	With playback and recording functions	5	For recording interviews for use in instructional activities and hygiene education
88	Generator	Gasoline engine, approx. 2 kVA, 4-stroke, with 30 m cord reel	1	Power supply for audio-visual equipment used in instructional activities where there is no electricity
89	Slide projector	Halogen lamp, horizontal round tray (80 slides min.)	1	For instructional activities involving maternal and child health, and hygiene education
90	Screens	1800 x 1800 mm, tripod type, white	2	Same as above
91	OHP	400 W, 3500 lumen min., 285 x 285 mm stage, portable	2	Same as above
92	Bicycles	Utility type, 26-inch, with basket, rod-type brakes	191	Utility type, 26-inch, with basket, rod-type brakes
93	Beds, mattresses and mosquito netting	Beds (mattresses 910 x 1910 x 100 mm min.), for hospital use, X-Family size, treated with insecticide	2800	For in-patient beds

5) Technical assistance

i) Organization of data processing environment

With respect to "environmental organization including computer anti-virus measures and daily maintenance", "organization and summarizing of health and medical data such as the ratios of patients per illness", and "preparation to construct databases such as inventory maintenance", guidance will be provided in know-how, beginning computer operation, and specific implementation of database operations.

One staff member with experience in computer systems management or the equivalent will be dispatched, for a period of approximately two months, and this person will create a report on local activities at the close of the undertaking.

ii) Provision of audio-visual educational materials

When the TVs, video players, OHPs, slide projectors, and tape recorders planned for procurement are used to carry out instructional and educational activities, guidance will be provided in preparing the video and OHP materials, creating slides, pamphlets, and software, and carrying out daily maintenance of the materials. Actual demonstrations of instructional activities will be carried out in a number of regions.

One staff member with experience in creating and providing guidance in audio-visual educational materials, or with experience in organizing audio-visual educational materials, will be dispatched, for a period of approximately two months, and this person will create a report on local activities at the close of the undertaking.

6) Monitoring

The survey will verify the following items concerning Central Africa on-site.

1) Verification of the distribution and organization of supplies and materials

The survey will verify that the supplies and materials transferred to Central Africa have been delivered to their final destinations (prefectural and regional hospitals, etc. to be selected at random), and that the supplies and materials have been organized properly within the hospitals targeted by the Project.

2) Confirmation of usage conditions following distribution

Based on the extent to which supplies and materials have been organized at the hospitals noted above, the conditions under which the supplies and materials are being used will be verified. In Central Africa, in particular, facilities everywhere are being affected by

the severe financial condition of the government, making it difficult to run the facilities, and difficult to restock and replenish everyday supplies and materials. For this reason, monitoring will be carried out to ascertain whether or not the supplies and materials procured through the Project are being put to effective use, and the frequency of those activities and everyday maintenance conditions will be surveyed and verified.

3) Trends in patient volume and changes in countermeasures against illnesses

The various hospitals will be surveyed prior to and after the Project is implemented, to see whether the patient volume increases or decreases, and to monitor trends in conditions of illness. Changes resulting from the medical supplies and materials provided in Central Africa through the Project will be studied, and the beneficial efficacy of the aid implementation will be ascertained.

4) Confirmation of the results of the technical assistance implemented in fiscal 2000

i) Organization of data processing environment

The current status of health- and medical-related databases will be verified, along with the status of computer viruses elimination, and daily maintenance systems. Discussions will then be held with the Central African side concerning the results of the verification.

ii) Provision of audio-visual educational materials

VTR software, as well as software and materials relating to OHPs and slides will be verified. Also, information on the results of instructional activities carried out during the time up to the survey will be compiled, along with documents and materials, and discussions will be held with the Central African side.

A large number of hospitals and facilities have been targeted by the Project, including five general hospitals at the Ministry of Health and in Bangui, 16 prefectural hospitals, and 191 regional hospitals. Because of the large number, several hospitals at each level will be chosen for monitoring, and on-site surveys will be conducted. The facilities to be sampled for surveying are the 26 hospitals indicated below.

i) Monitoring involving procured materials and supplies

- a. Ministry of Health (Malaria Countermeasures Team, Expansion of Immunization Program, Tuberculosis Countermeasures Team, Maternal and Child Health Strengthening Team)
- b. State-run laboratories
- c. Community General Hospital
- d. Amity General Hospital
- e. Bangui University Hospital

- f. Children's Hospital
- g. Eight prefectural hospitals (two in each health district (districts 2 to 5))
- h. Fifteen regional (three in each health district (districts 2 to 5))
- ii) Monitoring involving technical assistances
 - a. Ministry of Health (Malaria Countermeasures Team, Expansion of Immunization Program, Tuberculosis Countermeasures Team, Maternal and Child Health Strengthening Team)

2-2-3. Implementation Plan

2-2-3-1. Implementation Policy

The supplies and materials procured from the Japanese side through the Project will be transported over land from Douala in Cameroon to Bangui in Central Africa. After passing through Customs, supplies and materials will be transferred to Central Africa by sending those destined for medical facilities in Bangui City and in Health District 1 to the Ministry of Health, and those destined for medical facilities in other districts (2 to 5) to general prefectural hospitals (four facilities) in these four districts. Vaccines, however, will be flown by air from the country of procurement to Central Africa, and will be transferred at Bangui International Airport.

Following the transfer, supplies and materials will be distributed to the general hospitals in Bangui, the prefectural hospitals and the regional hospitals which are their final destinations, with the distribution costs being borne by the Government of Central Africa. The distribution destinations of the various supplies and materials are as indicated in Appendix 5.

2-2-3-2. Implementation Conditions

As described earlier, Central Africa does not yet have an adequate basic infrastructure, including roads, electricity supplies, water supplies, and communications, and while roads near urban metropolises are paved with asphalt, most roads in rural areas are not yet paved, and are surfaced only with laterite. For this reason, principle roads in rural areas develop large and small ruts during the torrential rains of the rainy season, as the sand and dirt are washed away, and this poses a significant obstacle to traffic. The International Trade Road that connects Central Africa with Cameroon is in much the same condition, and taking into consideration the delays in transportation caused by rain, it is necessary to make sure that plenty of time is assured for transportation.

Also, supplies and materials are to be transferred to five destinations in Central Africa, however it will be necessary to assure that the proper preparations are made prior to deliveries as well as assuring unloading and storage locations at the destination. This will require considerable discussion among the Supplier side, the Buyer side, and the Consultant.

2-2-3-3. Scope of Works

Installation construction will be required for the solar-type refrigerator (one) and wireless broadcasting devices (ten) that will be provided as part of the Expansion of Immunization Program. Solar panels and batteries will be installed to provide power for the refrigerator. Solar panels and batteries will also be installed for the wireless broadcasting devices, along with antennas.

The supplies and materials will be installed at the Ministry of Health and the health-related organizations and hospitals indicated below, and engineers will be dispatched from manufacturers and agents to carry out the installation work and test runs of the equipment. Subsequently, the engineers will provide guidance in running and operating the equipment.

(1) Solar-type refrigerator: One facility (Bossembélé Regional Hospital)

(2) Wireless broadcasting devices: Ten facilities (Ministry of Health, Mbaiki Prefectural Hospital, Sibut Prefectural Hospital, Kagabangoro Prefectural Hospital, Berb é rati Prefectural Hospital, Bouar Prefectural Hospital, Bossangoa Prefectural Hospital, Bozoum Prefectural Hospital, Bossembélé Regional Hospital, Yaloké Regional Hospital)

2-2-3-4. Consultant Supervision

The Project involves numerous items to be procured in large quantities, and a manufacturing period of four to six months will be necessary. In addition, the roads between Cameroon and the Central African Republic are in extremely poor condition (unpaved), so it will be necessary to assure a period of two to three months for transportation. This means the schedule is very tight with no leeway if the Project is to be implemented within the E/N period.

For this reason, the Supplier will be urged to deliver them at the earliest possible date, in order to avoid delays in procuring the supplies and carrying out the necessary work,

when the implementation process described below is carried out. In addition, monthly reports will be submitted on a comprehensive basis in order to maintain an accurate understanding of the progress of the Project, and the Project will be closely supervised..

2-2-3-5. Technical assistance

Engineers will be dispatched to implement the technical assistance based on the "2-2-1. Design Policy" and "2-2-2. Basic Plan" described earlier. The work will be carried out following the schedule described below.

1) Organization of data processing environment

(Schedule: 63 days on-site, 7 days in Japan)

On-site work	On-site work	On-site work	On-site work	Domestic work
Ministry of Health	Ministry of Health	Ministry of Health	Ministry of Health	
Guidance in organization methods	Compilation of information in order to build databases	Creation of databases	Introduction, guidance, data input	Creation of reports
15 days	13 days	14 days	21 days	7 days

2) Provision of audio-visual educational materials

(Schedule: 63 days on-site, 7 days in Japan)

On-site work	On-site work	On-site work	Domestic work
Ministry of Health (Bangui)	Ministry of Health (Bangui)	Ministry of Health (Bangui)	
Organization and supplementation of existing video software	Creation of planning packages for instructional activities	Making rounds (regional areas) Implementation demonstrations at each location	Creation of reports
21 days	28 days	14 days	7 days

2-2-3-6. Implementation Schedule

(1) Fiscal budget classifications

Term I (fiscal 2000)

Term II (fiscal 2001)

(2) Process schedule

<Term I>

Overall period (from E/N to date of transfer of goods): 12 months

From E/N to date of Supplier contract: 4 months

Deadline (from Supplier contract to transfer of goods): 8 months

Technical assistance: 2 months

<Term II>

Monitoring: 2 months

Table 2. Project Implementation Process

Accumulate month		1	2	3	4	5	6	7	8	9	10	11	12	13	
Term I	Signing of E/N	▼													
	Consultant Agreement		▲												
	Implementation design (approx. 4 months)			■ Final check of project details											
				■ Formulation of tender documents											
				■ Tender docs. Approved											
				▲ Tender notification											
					□ Site explanation, delivery of draft										
					■ Tendering, tendering evaluation										
					■ Supplier Contracts signed										
								▼ Approved by Foreign Ministry							
	Supervision of procurement (approx. 8 months)														
Technical Assistance (approx. 2 months)															

Accumulate month		1	2	3	4	5	6	7	8	9	10	11	12	13
Term II	Monitoring (approx. 2 months)		▲ Consultant Agreement											

On-site work
 Domestic work
 3rd-country work

2-3. Obligation of Recipient Country

The following items are the responsibility of the Central African side when the Project is implemented.

- (1) Appropriate and rapid execution of Customs procedures for procured supplies and materials
- (2) Assurance of warehouses and other storage facilities for storing procured supplies and materials
- (3) Distribution of the procured supplies and materials to their final
- (4) To bear commission for opening a bank account based on the banking arrangement (B/A) in effect when the Project is implemented, as well as commission for notification of authorization to pay (A/P) and commission for sending payments to the Supplier
- (5) Appropriate operation and maintenance management of the procured supplies and materials
- (6) Advance preparation for conferences, seminars, and other gatherings, and dispatch of personnel when the technical assistance and monitoring are implemented

2-4. Project Operation Plan

Because of financial difficulties and a shortage of maintenance engineers in Central Africa, supplies and materials that involve large-scale expenses for maintenance and maintenance management have been basically eliminated from the Project,. Consequently the economic burden on the government of Central Africa following implementation of the Project is believed to be fairly low. However, the Project involves items such as fuel for transportation equipment such as cars and motorcycles, which are subject to frequent use, and generators that provide power for wireless broadcasting devices, as well as generators used to supply power for audio-visual equipment and equipment that requires fuel on a daily basis. In practical terms, the hospitals to which these items are distributed will be bearing the expenses for maintenance management.

Government subsidies are being provided to general hospitals in Bangui and to prefectural hospitals in various areas, but because of government financial difficulties, the provision of subsidies to these hospitals will be terminated within the next few years,

and hospitals will be paying the expenses for daily maintenance of the facilities out of the revenues received from treatment fees. Generally, patients pay an amount between 100 and 250 FCFA (approximately 18 to 45 yen) for the initial visit and consultation, and these payments account for the main bulk of the hospital's medical examination revenues. Additional payments made for tests and medical treatment amount, depending on the content of the tests and treatment, to between 100 and 5,000 FCFA (18 and 900 yen), and hospitals see an average of 30 to 50 patients per day.

Hospitals will be paying the expenses for generators and the fuel required in order to run the cars and motorcycles out of the treatment fees described above. However, no documents exist concerning revenues at each facility, and there is no way to confirm detailed usage planning or other relevant information.

In the past, when cold-chain equipment and transportation equipment were supplied to Central Africa by the government of Japan, UNICEF, and other overseas aid organizations, it was found through on-site surveys that, at hospitals in the same financial circumstances as those targeted by the Project, the hospitals were managing to pay for supplies and materials by cutting back on the usage of equipment, and taking the necessary funds out of revenues received for treatment. These hospitals were covering their expenses and also keeping the equipment well maintained. Other supplies and materials are being selected on the basis of maintenance-free, so it is thought that maintenance management will not cause significant problems.

Chapter 3. Project Evaluation and Recommendations

3-1. Project Effect

3-1-1. Measures against malaria

The testing equipment procured through the Project will be used to replace and supplement existing equipment at the prefectural hospitals that are the top-referral facilities in each of the various prefectures. Each of the targeted hospitals currently has one or two microscopes, most of which are old and severely deteriorated. These can be upgraded through the Project, allowing improvements in testing, the number of tests conducted, and the quality of the testing. Additionally, reagents such as Giemsa staining fluid and consumable items such as glass slides are chronically in short supply, and by providing materials such as these, the Project will facilitate the early detection of malaria in patients, and will contribute to improving the quality of medical services available to local populations.

In addition, the government of Central Africa and UNICEF are currently in the midst of a pilot project to distribute mosquito net with insecticide. This means that the supplies and materials procured through the Project can be used to support facets such as monitoring of the numbers of patients in the local populations who have contracted malaria. It will also help to realize the possibility of a project to distribute mosquito net throughout Central Africa as a whole in the future.

3-1-2. Measures against tuberculosis

Replacing and supplementing aged and deteriorating equipment used in testing and basic medical care, such as microscopes and stethoscopes, will facilitate early detection of disease in patients at regional hospitals targeted for refurbishment, and can contribute to improving medical services for the local populations.

In conjunction with the anti-tuberculosis drugs being supplied by the government of France and the EU, the Project will help to improve series of medical services such as testing for and treatment of tuberculosis currently being provided in Central Africa.

3-1-3. Expansion of Immunization Program

As described earlier, Central Africa is strongly dependent on equipment supply program of Japan in order to combat infectious diseases. As of 1999, vaccination rates were as follows: BCG: 55%, Poliomyelitis: 34.3%, DPT: 38.2%, and Measles: 40%. The refrigerators, freezers and vaccine carriers to be procured through the Project are aimed at strengthening the immunization systems in the various areas, where organization of cold chain systems lags behind. The equipment provided through the Project will also contribute to improving immunization activities and immunization rates throughout Central Africa as a whole.

Cars, motorcycles, communications equipment, audio-visual equipment such as OHPs and computers, and other equipment will boost the effect of data compiling and monitoring operations involving immunizations and will enable instructional and educational activities to be carried out so that local populations understand the need for immunizations and for disease prevention in general. Such equipment can also contribute to raising immunization rates.

The Ministry of Health in Central Africa has set a target of boosting immunizations (BCG, Poliomyelitis, DPT and Measles) for infants under one year of age and for their mothers to 80% in the future. National development planning in the health field is currently being carried out, and the implementation of the Project will provide substantial support in improving the immunization rate in Central Africa.

3-1-4. Strengthening maternal and child health

The gynecological and obstetrical supplies and materials to be procured through the Project are aimed at qualitatively improving the delivery equipment at prefectural and regional hospitals, where equipment in general is inadequate and is severely aged and deteriorated. The equipment procured through the Project will make it possible to provide safe and hygienic medical services. Furthermore, lighting and illumination equipment will function to assure more efficient and safer deliveries at regional hospitals outside of Bangui, where lighting conditions are currently unsatisfactory. In addition, the beds to be procured through the Project will contribute to upgrading the facilities in the hospitals and alleviating insufficiencies, thus improving the sanitation levels and the surroundings for inpatients.

Audio-visual materials (OHPs, computers, etc.), cars, and other equipment can be used in instructional and educational activities targeting health and hygiene among local populations, which will lead to improving the overall level of health and hygiene in Central Africa.

3-2. Recommendations

Japan has been assisting Central Africa in a number of ways, among them building roads, equipment supply program to combat infectious diseases control, and building schools (a Basic Design Plan is currently being implemented in this area). Central Africa places extremely high expectations on the Government of Japan in terms of assistance.

One area of concern is that the government of Central Africa is experiencing severe financial difficulties and the outlook for recovery from the current economic confusion is bleak. Because of this, implementing the Project will be problematic for Central Africa in terms of budgetary means, the ability to carry out maintenance management, and preparation for receiving aid, without assistance from overseas organizations. In addition, the continuous funding difficulties experienced by the government and the various hospital facilities will affect the ability of these institutions to procure the necessary consumable items on their own, on an ongoing basis, following implementation of the Project, and when the spare parts procured from Japan along with the machinery and equipment have run out, it is feared that there will be a reduction in the beneficial efficacy of the Project.

At the same time, as described earlier, it will be difficult to verify the delivery conditions and usage conditions of the various supplies and equipment procured within the allotted time. Because of the financial problems and the fragile implementation system of the Government of Central Africa, it is believed that monitoring will be necessary for a given period of time following implementation of the Project, in order to verify that the materials and equipment are being distributed.

Instructional and educational activities among local populations in the areas of expansion of immunization and strengthening maternal and child health are currently being carried out using materials provided by UNICEF. Because the equipment and

know-how necessary to carry out these programs are insufficient, however, and because no software has been accumulated and there are no experts in the field to provide guidance, these programs and activities need to be strengthened. After the supplies and equipment have been transferred to the Central African side, it is believed that a technical assistance will be necessary to provide support for the above activities.

Furthermore, from the standpoint of establishing a longterm organizational system, we hope that JICA experts and members of the Japan Overseas Cooperation Volunteers will be dispatched to oversee the effective use of the medical supplies to be procured through the Project, as well as the operation and maintenance management of the materials and supplies provided under the "1998 Medical Equipment Provision Project", the "1993-1999 Supply of Special Materials to Combat Disease" and other support programs conducted by the Government of Japan in the past.

Appendix-1

- Member List of the Study Team -

1. **Chief of Mission** : KIKUCHI Takahisa
Counselor
Ambassador of Japan in Central African Republic

2. **Equipment Planning** : ARAI Daizo
General Grant Aid Division,
Grant Aid Management Department
Japan International Cooperation System (JICS)

3. **Equipment Planning** 2: MIYASHITA Hiromichi
Office of Technical Study
Japan International Cooperation System (JICS)

4. **Procurement Planning**: IMAI Shunsuke
Technical Support Division,
Technical Cooperation Management Department,
Japan International Cooperation System (JICS)

5. **Interpreter** : ARAI Tadao
Japan International Cooperation Center (JICE)

Appendix-2

- Study Schedule -

No.	Date		Itinerary	Stay
1	10/14	Sat	Narita 12:05 (AF275) 17:10 Paris 23:15 (AF884)	On Board
2	10/15	Su n	06:20Bangui 13:00 Japanese Embassy in Central Africa (meeting with Mr. Kikuchi/Courtesy Visit)	Bangui
3	10/16	Mon	10:30 Japanese Embassy in Central Africa (Study/ Meeting) 14:00 Ministry of Health (Courtesy Visit/Discussion) 16:00 Kashima Construction Corporation Branch (collect security information)	"
4	10/17	Tue	08:00 Ministry of Health (Discussion) 10:00 French Embassy in Central Africa (Discussion/collect information) 16:00 Kashima Construction Corporation (Site Study/ Meeting)	"
5	10/18	Wed	08:00 UNICEF (Discussion/collect information) 13:00 Ministry of Health (Discussion)	"
6	10/19	Thu	09:00 Ministry of Health (Discussion) 11:00 WHO (Discussion/collect information)	"
7	10/20	Fri	07:00 Bangui NID's Campaign (Inspection) Sibut (Site Study) Bangui	"
8	10/21	Sat	07:00 Bangui Bossembélé (Site Study) Baoui	Baoui
9	10/22	Sun	07:00 Baoui Baoro (Site Study) Bouar (Site Study)	Bouar
10	10/23	Mon	07:00 Bouar Berberati	Berberati
11	10/24	Tue	07:00 Berberati (Site Study) Baoui	Baoui
12	10/25	Wed	09:00 Baoui Bouyembe (Site Study) Bangui	Bangui
13	10/26	Thu	07:00 Bangui Mbaiki (Site Study) Bangui	"
14	10/27	Fri	11:00 Ministry of Health (Discussion)	"
15	10/28	Sat	Reference Filing / Market Research	"
16	10/29	Sun	Reference Filing / Member Meeting	"
17	10/30	Mon	09:00 Ministry of Health (Discussion)	"
18	10/31	Tue	11:00 Ministry of Health (Discussion) 15:30 Pasteur Laboratory (collect information)	"
19	11/1	Wed	Minutes Preperation / Meeting	"
20	11/2	Thu	11:00 Ministry of Health (Signing of Minutes)	"
21	11/3	Fri	09:00 Friend of Africa (Boy-Rabé Hospital) 10:30 Community National Hospital	"
22	11/4	Sat	Reference Filing / Market Research	"
23	11/5	Sun	Reference Filing / Member Meeting	"
24	11/6	Mon	09:00 National Labo-Center (collect nformation) 14:00 UNICEF (Dicussion)	"
25	11/7	Tue	09:00 Ministry of Health (collect information)	"
26	11/8	Wed	09:00 Ministry of Health (collect information) 14:30 Bangui University Hospital (collect information)	"
27	11/9	Thu	09:00 Ministry of Health (collect information) 15:00 Dameca S.A. (Local Procurement Study) 16:30 SDV Groupe Bolloré (Transportaiton Condition Study)	"
28	11/10	Fri	10:00 Japanese Embassy in Central Africa (Study Report) 11:00 Ministry of Health (Discussion/Report)	"
29	11/11	Sat	10:00 Ministry of Health (collect information)	"
30	11/12	Sun	Bangui 22:05(AF889)	On Board
31	11/13	Mon	06:30Paris	Paris
32	11/14	Tue	10:00 JICA France Office (Study Report) Paris 13:20 (AF276)	On Board
33	11/15	Wed	08:55Narita	

Appendix-3

- List of Parties Concerned in the Recipient Country -

1. Ministère de la Santé Publique et de la Population

- | | |
|---------------------------------------|--|
| (1) M. Richard Lakoe | Ministre de la Santé Publique et de la Population |
| (2) M. Jérôme Gobi-Goyom | Chef de Cabinet |
| (3) M. Gilbert Dimanche | Direction General de la Santé Publique et de la Population |
| (4) M. Ali-Saka | Direction General des Service D'Appui /
Directeur, Direction des Services Administratifs et Financies |
| (5) Dr. Emmannel Kiteze | Directeur, Direction des Etudes et de la Planification |
| (6) Dr. Emmannel Nwenbi | Directeur, Direction de la Santé Familiale et de la Population |
| (7) Dr. Justin Ndoyo | Directeur, Direction de la Médecin Préventive et de lutte contre
la Maladie |
| (8) Dr. Madji Nestor | Chef, Service National de lutte contre la Paludisme |
| (9) Dr. Lucas Yanguidji | Chef, Service National de lutte contre la Tuberculose |
| (10) Dr. Yaah Mberyoy | Chef, Service du Programme Elargi de Vaccination |
| (11) M. Keiro Jerome | Logisticèn, National du Programme Elargi de Vaccination |
| (12) M. Noël Dandet | Directeur, Service des Equipements Biomedicaux et de la Maintenance |
| (13) Ma. Béatrice Dykczyk Scac | Conseiller Technique/ Expert (France) |

2. Laboratoire National de Biologie / Clinique et de Santé Publique

- | | |
|----------------------------------|--------------------------------|
| (14) Dr. Jean Mazinzapako | Directeur / Médecin Biologiste |
|----------------------------------|--------------------------------|

3. Ambassade de France

- | | |
|-------------------------------|---|
| (15) M. Georges Dupuis | Conseiller, Chef du Service de Coopération et d'Action Culturelle |
|-------------------------------|---|

4. World Health Organization (WHO)

- | | |
|-------------------------------|-----------------------------------|
| (16) Dr. A. Babanoussa | Representant |
| (17) Dr. P. Namkona | Conseiller en Gestion Sanitaire |
| (18) Dr. P. Sokanbi | Conseiller en Santé de la Famille |

5. Fonds del Nations Unions pour l'enfance (Unicef)

- | | |
|--------------------------------------|---|
| (19) Dr. Aboudou Karim Andele | Administrateur du Programme (Santé / Nutrition) |
|--------------------------------------|---|

6. Directeur de l'Institut Pasteur

- | | |
|--------------------------------|---------------------|
| (20) Dr. Morvan Jacques | Chef de Laboratoire |
|--------------------------------|---------------------|

7. Hôpital Communautaire

- | | |
|--------------------------------------|---|
| (21) M. Pemi Saint Pist Leppa | Directcteur (Intendant Militalia / Colonel) |
| (22) Dr. Pierre Minssart | Chef du Service Médecine / Médecian Cordiologue |

8. Centre National Hospitaler et Universitaire de Bangui (CNHUB)

- | | |
|------------------------------------|-----------------|
| (23) Prof. Dr. Yaya Georges | Ophtalmologiste |
|------------------------------------|-----------------|

9. KEMO

- (24) **M. Fowrlin Bencoewe** Prefêt de la Kemo
(25) **M. Vidackpa Gesrfes** Maire de la Sibut
(26) **Dr. Boua Bernard** Chef de Region Sanitaire No. 1
(27) **Dr Poumale Flavien** Médecin Chef de la Prefecture Sanitaire de la Kemo

10. NANAMAMBERE

- (28) **Ma. Philomene Daanan** Prefêt Par Interim de la Nanamambere
(29) **Dr. Senany Raymond** Chef Senia Ad. Gestionnaire Region No. 2
(30) **M. Denamgane Igaac** Gestionnaire Hôpital Bouar
(31) **Dr. Seryiee Cveoys** Médecin Chef Par Interim Hôpital de Bouar
(32) **Dr. Bendoloum Gaston** Médecin Chef de Centre du Santé de Baoro

11. OMBELLA-MPOKO

- (33) **M. Loban Elysee** Sous-Prefêt Bossembelé
(34) **Dr. Ngvissibanda Paul** Médecin Chef Par Interim Hôpital de Bossembelé
(35) **Ma. Rosalia An** Sister Saint Paul de Chantre/Gestinaire de dépôt Ombelle M'Poko

12. MAMBERE-KADEI

- (36) **M. Andre Sondha-Bouih** Prefêt de la Mambere-Kadei
(37) **M. Yesse Hemri** Maire de la Berberati
(38) **Dr. Mongbaziana Hondre** Médecin Chef, Hôpital Regional de Berberati
(39) **Dr. Ogo David** Adjoind Medecin Chef, Hôpital Reginonal de Berberati

13. LOBAYE

- (40) **Dr. Senekian Dominique** Médecin Chef Hôpital Regional Mbaïki

14. Amis D'Afrique (NGO)

- (41) **M. Dabanga Manrice** Administrateur
(42) **Dr. Kaba Mebri Joachim** Médecin
(43) **Dr. Ndayishimiye Francon** Médecin

15. SDV Groupe Bolloré (Forwarder)

- (44) **M. Félix Gaza** Chef d'Exploitation

16. Ambassade du Japon

- (45) **Satoshi Kawai** Minister
(46) **Takahisa Kikuchi** Councilor
(47) **Hiroyuki Oshima** Third Secretary

17. Kashima Construction Corporation Central African Branch

- (48) **Masuharu Yasuda** Head
(49) **Takashi Sakota** Staff
(50) **M. Jean-Joseph Maliavo** Chef de Service Administratif

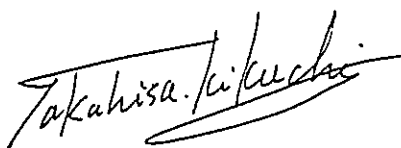
PROCES-VERBAL RELATIF A L'ETUDE
POUR
LE PROJET DE FOURNITURE DE MATERIELS POUR LA SANTE DE LA MERE ET
DE L'ENFANT (PROGRAMME DE LUTTE CONTRE LA MALADIE / PROGRAMME
ELARGI DE VACCINATION)
EN
REPUBLIQUE CENTRAFIRICAINE

Suite à la requête adressée par le Gouvernement de la République Centrafricaine (désignée ci-après "Centrafrique"), le Gouvernement du Japon a décidé de procéder à une étude sur le Projet de Fourniture de Matériels pour la Santé de la Mère et de l'Enfant (Programme de Lutte contre la Maladie / Programme Elargi de Vaccination) (désigné ci-après le "Projet") et a confié ladite étude à l'Agence Japonaise de Coopération Internationale (désignée ci-après la "JICA").

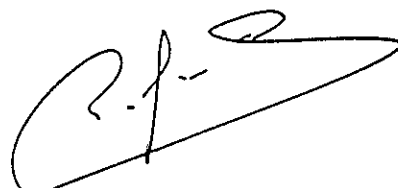
La JICA a envoyé du 15 octobre au 12 novembre 2000 en Centrafrique une Mission d'étude (désignée ci-après la "Mission"), dirigée par Monsieur Kikuchi Takahisa, Conseiller de l'Ambassade du Japon en Centrafrique. La Mission a fait une série de discussions avec les autorités compétentes du Gouvernement centrafricain, et mené l'étude sur terrain dans les sites du Projet.

A l'issue des discussions et des enquêtes menées sur le terrain les deux parties ont confirmé les principaux points mentionnés dans le document ci-joint.

Fait à Bangui, le 2 novembre 2000



KIKUCHI Takahisa
Chef de Mission
Agence Japonaise de Coopération
Internationale (JICA)



Ricard LAKOE
Ministre de la Santé Publique et de la Population
République Centrafricaine

DOCUMENT

1. OBJECTIF DU PROJET

L'objectif du Projet est de soutenir le Programme de lutte contre le paludisme, le Programme de lutte contre la tuberculose, le Programme Elargi de Vaccination et le Programme de renforcement de soins de la Mère et de l'Enfant, le Programme de lutte contre les maladies en Centrafrique, au moyen de la fourniture des matériels pour les mesures à prendre contre le paludisme et la tuberculose ainsi que le matériel de la chaîne de froid.

2. SITE DU PROJET

Le présent Projet couvrira toute l'étendue du territoire Centrafricain. La surveillance des mesures à prendre contre le paludisme sera discutée à part.

3. MINISTERE RESPONSABLE ET ORGANISME D'EXECUTION

Le responsable et l'organisme d'exécution est le Ministère de la Santé Publique et de la Population.

4. CONTENU DE LA REQUETE ENVOYEE PAR LE GOUVERNEMENT CENTRAFRICAIN

- 4-1. A l'issue des discussions avec la Mission, le Gouvernement de Centrafrique a formulé la requête définitive sur les matériels indiqués dans l'Annexe-1. La JICA procède à l'évaluation sur une pertinence de cette requête et recommande au Gouvernement du Japon de la consentir.
- 4-2. Le Gouvernement de Centrafrique a établi l'ordre prioritaire à chaque matériel dans l'Annexe-1.
A= Première priorité / Indispensable
B= Deuxième priorité / Nécessité à examiner
C= Troisième priorité / Si possible

5. PROGRAMME D'AIDE FINANCIERE NON-REMBOURSABLE DU JAPON

- 5-1. Le Gouvernement centrafricain a compris le Programme d'aide financière non-remboursable du Japon, exposé par la Mission en indiquant dans l'Annexe-2
- 5-2. En cas d'exécution du Projet après la décision prise par le Gouvernement du Japon, le Gouvernement centrafricain prend en charge les mesures indiquées dans l'Annexe-3 pour la bonne conduite du Projet.

6. CALENDRIER DE L'ETUDE

- 6-1. Les consultants poursuivent leurs études sur place jusqu'au 12 novembre 2000.
- 6-2. La JICA rédige un rapport et le soumettra au Gouvernement centrafricain vers la fin mars 2001.

7. AUTRES POINTS RELATIFS AU PROJET

- 7-1. Le Gouvernement centrafricain attribuera le budget et le personnel nécessaires à l'exécution du présent Projet.
- 7-2. Le Gouvernement centrafricain réalisera conjointement la fourniture d'équipements et de médicaments fournis par le présent Projet jusqu'aux derniers points de distribution.
- 7-3. La présente Mission décidera la quantité nécessaire avant le départ de ladite mission en Centrafrique
- 7-4. La République centrafricaine a demandé à la Mission japonaise les services de conseil pour l'opération et maintenance sur les équipements médicaux fournis par le présent Projet en tant que coopération financière non-remboursable du Japon.

LISTE DU MATERIEL (PROGRAMME DE LUTTE CONTRE LE PALUDISME)

No.	EQUIPEMENT	QUANTITE	PRIORITAIRE
1	MICROSCOPE BINOCULAIRE MIXTE	21	A
2	CENTRIFUGEUSE A MICROHEMATOCRITE	2	C
3	BAC A COLORER	36	C
4	BOITE POUR RANGEMENT DES LAMES	36	C
5	COMPTEURS A DEUX TOUCHES	18	C
6	MINUTERIE	18	C
7	HEMOGLOBINOMETRE + ACCESSOIRES	18	C
8	RESERVOIR D'EAU	17	C
9	EPROUVETTES(50, 100, 250, 500, 1000ML)	85 btes	A
10	PIPETTES GRADUEES(1, 5, 10ML: BOITE DE 10)	17 btes	A
11	MICRO-ORDINATEUR(DESK TOP) + IMPRIMANTE	2	A
12	PHOTOCOPIEUR + ACCESSOIRES	2	A
13	COLORANTS(GIEMSA)	85	A
14	COLORANTS(MAY-GRUNWALD)	85	B
15	LAMES PORTE OBJET A BORD DEPOLI(BOITE DE 50)	1700 btes	A
16	LANCETTES OU VACCINOSTYLE STERILE(BOITE DE 250)	320 btes	A
17	GRANTS EN PLASTIQUE(BOITE DE 100)	500 btes	A
18	HUILE A IMMERSION FL/100ML	36	A
19	COTON HYDROPHILE EN KG	180	C
20	COTON CARDE EN KG	180	C
21	ALCOOL A 90° EN LITRES	200	A
22	METHANOL EN LITRES	36	B
23	COMPRESSES EN ROULEAU	36	C
24	MICRO TUBES CAPILLAIRES HEPARINES(BOITE DE 100)	15 btes	C
25	BUREAU AVEC TIROIR	20	C
26	CHAISES	40	C
27	ARMOIRES	20	C
28	TABLIER EN PLASTIQUE REUTILISABLE	60	B
29	BLOUSE MANCHES LONGUES	60	C
30	BOTTE(PAIRES)	60 btes	C
31	BASSIN EN PLASTIQUE	60	C
32	IMPERMEABLE	60	C
33	FUT VIDE	60	C
34	LIT DE CAMP	3	C
35	GOBELETS DOSEURS(100, 500, 1000ML)	60	B
36	VERRES MESUREURS(BECHER: 50, 100, 1000ML)	60	B
37	MATERIELS D'ENTOMOLOGIE: LOUPE	4	B
38	MOUSTIQUAIRE	13000	B
39	PRODUITS INSECTICIDES K. OTHRINE EC25	310 litres	B
40	GRANT MANCHES LONGUES EN PLASTIQUE	60	B
41	GEANT MANCHES COURTES EN PLASTIQUE	60	B
42	MASQUES HYGIENIQUES	60	C

LISTE DU MATERIEL (PROGRAMME DE LUTTE CONTRE LA TUBERCULOSE)

No.	EQUIPEMENT	QUANTTE	PRIORITAIRE
1	MICROSCOPE	24	A
2	BALANCE	60	A
3	STETHOSCOPE	50	B
4	MICRO-ORDINATEUR(DESK TOP) + IMPRIMANTE	1	A
5	PHOTOCOPIEUR	1	A
6	RIFAMPICINE(150MG/ISONIAZIDE100MG CP)	1722000 CP	B
7	PYRAZINAMIDE(400MG CP)	1302000 CP	B
8	STREPTOMYCINE INJECTABLE(1G)	48000 FL	B
9	ETHAMBUTOL(400MG/ISONIAZIDE 150MG CP)	1800000 CP	B
10	ISONIAZIDE(100MG CP)	80000 CP	B
11	ETHAMBUTOL(400MG CP)	1230000 CP	B
12	COLORANTS, REACTIFS (1 jeu)	1	B
13	CRACHOIR	8000	A
14	SERINGUE POUR STREPTOMYCINE	20000	A
15	SERINGUE ET AIGUILLE	25000	B

LISTE DU MATERIEL (PROGRAMME ELARGI DE VACCINATION)

No.	EQUIPEMENT	QUANTTE	PRIORITAIRE
1	REFRIGERATEUR(ABSORPTION) ①	20	A
2	REFRIGERATEUR(ABSORPTION) ②	10	C
3	REFRIGERATEUR(SOLAIRE) ①	2	A
4	REFRIGERATEUR(SOLAIRE) ②	15	A
5	CONGELATEUR(COMPRESSION)	3	C
6	CONGELATEUR(ABSORPTION)	20	A
7	GACIERE	20	A
8	PORTE-VACCINS ①	17	B
9	PORTE-VACCINS ②	15	B
10	VEHICULE(PICK UP / DOUBLE CABINE)	5	A
11	MOTO OFF-ROAD(ACCES DIFFICILE) (90~125CC)	30	A
12	RADIO EMETTEUR/RECEPTEUR(MULTIFREQUENTIELLE) + GROUPE ELECTROGENE	10	A
13	GROUPE ELECTROGENE MOBILE	1	A
14	RETROPROJECTEUR(OHP) + ECRAN	1	B
15	PHOTOCOPIEUR	1	B
16	MICRO-ORDINATEUR(DESK TOP) + IMPRIMANTE	2	A
17	MICRO-ORDINATEUR(LAP TOP)	1	A

LISTE DU MATERIEL (PROGRAMME DE RENFORCEMENT DE SOINS
DE LA MERE ET DE L'ENFANT)

No.	EQUIPEMENT	QUANTTE	PRIORITAIRE
1	TABLE DE CONSULTATION	50	A
2	TABLE D'ACCOUCHEMENT	50	A
3	BOITE CESARIENNE	20	A
4	BOITE LAPAROTOMIE	2	A
5	MINI-DOPPLER	2	B
6	TENSIOMETRE + STETOSCOPE	121	A
7	STETOSCOPE DE PINARD	114	A
8	POIRE SALVA	114	A
9	BALANCE	114	A
10	BALANCE POUR BEBES	114	A
11	PORTENCE	1510	A
12	BASSIN DE LIT	114	A
13	SPECULUM(P,M,G)	342	A
14	HARICOT	114	A
15	VACCUM EXTRACTOR	16	A
16	PLATEAUX(P,M,G)	342	A
17	TAMBOUR(P,M,G)	342	A
18	POISSONNIERE	114	A
19	TABLIER PLASTIQUE	342	A
20	ALEZE	342	A
21	LAMPE D'EXAMEN + GROUPE ELECTROGENE	16 btes	A
22	LAMPE D'ALCOOL	114	A
23	BROSSE A ONGLE	224	A
24	THERMOMETRE	342	A
25	NURSESCOPE	5	B
26	TELEVISEUR	1	C
27	MAGNETOSCOPE	1	C
28	MAGNETOPHONE	5	C
29	GROUPE ELECTROGENE	1	B
30	PROJECTEUR DISPOSITIF	1	C
31	ECRAN	2	C
32	RETROPROJECTEUR(OHP)	2	C
33	BICYCLETTE	270	B
34	LIT + MATELAS + MOUSTIQUAIRE	2800	A

PROGRAMME D'AIDE FINANCIERE NON-REMBOURSABLE DU JAPON

1. Procédure de l'aide financière non-remboursable

Le programme d'aide financière non-remboursable est exécuté selon la procédure suivante.

1) Demande (requête effectuée par le pays bénéficiaire)

Etudes (étude préliminaire/étude du concept de base effectuées par la JICA)

Estimation et approbation (estimation par le gouvernement du Japon et approbation par le Conseil des ministres du Japon)

Détermination de l'exécution (Echange de Notes entre les deux gouvernements)

Exécution (Mise en oeuvre du Projet)

2) Lors de la première étape, la requête présentée par le pays bénéficiaire est examinée par le gouvernement du Japon (Ministère des Affaires étrangères) afin de déterminer si elle est pertinente dans le cadre de l'aide financière non-remboursable. Au cas où il serait confirmé que la requête est prioritaire en tant que projet d'aide financière non-remboursable, le gouvernement du Japon demande à la JICA de procéder à une étude.

Lors de la seconde étape, l'étude (étude du concept de base) est effectuée par la JICA ayant conclu un contrat avec une société de consultation japonaise chargée de l'exécution.

Lors de la troisième étape (estimation et approbation), le gouvernement du Japon décide, sur la base du rapport d'étude du concept de base élaboré par la JICA, si le Projet convient au cadre de l'aide financière non-remboursable. Il est ensuite soumis pour approbation au Conseil des ministres.

Lors de la quatrième étape (détermination de l'exécution), l'exécution du Projet approuvé par le Conseil des ministres est officiellement déterminée par la signature de l'Echange de Notes entre les deux gouvernements.

Au fur et à mesure de l'exécution du Projet, la JICA accélérera le processus d'exécution en apportant son soutien au pays bénéficiaire pour la procédure d'appel d'offres, les signatures des contrats et les autres opérations nécessaires.

2. Contenu de l'étude

1) Contenu de l'étude

Le but de l'étude (étude du concept de base) effectuée par la JICA est de fournir un document de base permettant de déterminer si un projet est exécutable ou non dans le cadre du Programme d'aide financière non-remboursable du Japon. Le contenu de l'étude est le suivant:

- a) confirmer l'arrière-plan de la requête, les objectifs et les effets du Projet ainsi que les capacités de maintenance du pays bénéficiaire nécessaires à l'exécution du Projet
- b) évaluer la pertinence de l'aide financière non-remboursable du point de vue technologique et socio-économique
- c) confirmer le concept de base du plan convenu après discussions entre les deux parties
- d) préparer un plan de base du Projet
- e) estimer les coûts du Projet

Le contenu de la requête n'est pas obligatoirement approuvé en tant que contenu de l'aide financière non-remboursable. Le concept de base du Projet doit être confirmé par rapport au cadre d'aide financière non-remboursable du Japon.

Le gouvernement du Japon demande au gouvernement du pays bénéficiaire de prendre toutes les mesures qui pourraient s'avérer pour assurer son indépendance lors de l'exécution du Projet. Ces mesures doivent être garanties même si elles n'entrent pas dans la juridiction de l'organisme du pays bénéficiaire en charge de l'exécution du Projet. Par conséquent, l'exécution du Projet doit être confirmé par toutes les organisations concernées du pays bénéficiaire par la signature des minutes des discussions.

2) Sélection des consultants

En vue de la bonne exécution du Projet, la JICA effectue une sélection parmi les consultants enregistrés auprès de la JICA après avoir procédé à un examen des propositions soumises par ces derniers. Le consultant sélectionné procède à l'étude du plan de base et élabore le rapport sur la base

des références fournies par la JICA.

A l'étape de conclusion du contrat entre le consultant et le pays bénéficiaire après l'Echange de Notes, la JICA recommande le même consultant que celui qui a participé à l'étude du concept de base afin d'assurer une cohérence technique entre l'étude du concept de base et le plan détaillé et d'éviter tout délai indu provoqué par la sélection d'un autre consultant.

3. Plan de l'aide financière non-remboursable du Japon

1) Qu'est qu'une aide financière non-remboursable?

Le Programme d'aide financière non-remboursable accorde au pays bénéficiaire des fonds non-remboursables qui permettront de fournir les installations, les équipements et les services (main d'oeuvre ou transport, etc.) pour le développement socio-économique du pays, selon les principes suivants et conformément aux lois et réglementations afférentes du Japon. L'aide financière non-remboursable n'est pas effectuée sous forme de don en nature au pays bénéficiaire.

2) Echange de Notes(E/N)

L'aide financière non-remboursable du Japon est accordée conformément aux Notes échangées entre les deux gouvernements et dans lesquelles sont confirmés, entre autres, les objectifs, la durée, les conditions et le montant de l'aide.

3) La "durée de l'aide" s'inscrit dans l'année fiscale dans laquelle le Conseil des ministres a approuvé le Projet. Toutes les procédures d'aide, Echange de Notes, conclusion des contrats avec le consultant et le contractant et paiement final à ceux-ci, doivent être achevées durant cette année fiscale.

Toutefois, en cas de retard lors de la livraison, de l'installation ou de la construction due à des éléments incontrôlables tels que les conditions météorologiques, la durée de l'aide financière non-remboursable pourra être prolongée d'une année fiscale supplémentaire après accord entre les deux gouvernements.

4) L'aide doit être en principe réservée exclusivement à l'achat de produits provenant du Japon ou du pays bénéficiaire, et aux services des ressortissants japonais ou du pays bénéficiaire.

Le terme "ressortissant japonais" signifie les personnes physiques japonaises ou les personnes morales japonaises dirigées par des personnes physiques japonaises.

Lorsque les deux gouvernements le jugent nécessaire, l'aide financière non-remboursable peut être utilisée pour les produits ou les services tel que le transport d'un pays tiers (autre que le Japon ou le pays bénéficiaire).

Toutefois, dans le cadre de l'aide financière non-remboursable, les principaux contractants, à savoir le consultant, l'entrepreneur et la société de commerce nécessaires à l'exécution de l'aide doivent en principe être exclusivement des ressortissants japonais.

5) Nécessité de la vérification

Le gouvernement du pays bénéficiaire ou son représentant autorisé conclura les contrats en Yen japonais avec les ressortissants japonais. Ces contrats seront vérifiés par le gouvernement du Japon. Cette vérification est nécessaire car les fonds de l'aide financière non-remboursable proviennent des taxes des citoyens japonais.

6) Dispositions à prendre par le gouvernement du pays bénéficiaire

Lors de l'exécution de l'aide financière non-remboursable, le pays bénéficiaire devra prendre les dispositions suivantes:

- (1) Acquérir, dégager et niveler le terrain nécessaire pour les sites du Projet, avant le commencement des travaux de construction,
- (2) Assurer les installations de distribution d'électricité, d'approvisionnement et d'évacuation des eaux ainsi que les autres utilités nécessaires à l'intérieur et aux alentours du site,
- (3) Prévoir les bâtiments nécessaires avant les travaux d'installation dans le cas où le Projet consiste à fournir des équipements,

(4) Prendre en charge la totalité des dépenses et l'exécution rapide du déchargement, du dédouanement dans le port de débarquement et le transport terrestre des produits achetés dans le cadre de l'aide financière non-remboursable,

(5) Exonérer les ressortissants japonais de droits de douane, taxes intérieures et ou autres levés fiscaux imposés dans le pays bénéficiaire eu égard à la fourniture des produits et des services spécifiés dans les contrats vérifiés,

(6) Accorder aux ressortissants japonais dont les services pourraient être requis en relation avec la fourniture des produits et des services spécifiés dans les contrats vérifiés, toutes les facilités nécessaires pour leur entrée et leur séjour dans le pays bénéficiaire pour l'exécution des travaux.

(7) "Usage adéquat"

Le pays bénéficiaire est requis d'entretenir et d'utiliser les installations construites et les équipements achetés dans le cadre de l'aide financière non-remboursable de manière adéquate et efficace et de désigner le personnel nécessaire pour le fonctionnement et la maintenance ainsi que de prendre en charge toutes les dépenses autres que celles couvertes par l'aide financière non-remboursable,

(8) "Réexportation"

Les produits achetés dans le cadre de l'aide financière non-remboursable ne doivent pas être réexportés à partir du pays bénéficiaire.

(9) Arrangement bancaire(A/B)

a) Le gouvernement du pays bénéficiaire ou son représentant autorisé devra ouvrir un compte à son nom dans une banque de change agréée au Japon (ci-après dénommée la "Banque"). Le gouvernement du Japon exécutera l'aide financière non-remboursable en procédant aux paiements en Yen japonais pour couvrir les obligations du gouvernement du pays bénéficiaire ou de son représentant autorisé conformément aux contrats vérifiés.

b) Les paiements seront effectués lorsque les demandes de paiement seront présentées par la Banque au gouvernement du Japon conformément à l'Autorisation de Paiement émise par le gouvernement du pays bénéficiaire ou de son représentant autorisé.

Principaux travaux à exécuter par chaque gouvernement

N°	Eléments	Couvert par la coopération	Couvert par le pays
1.	Prise en charge des commissions suivantes de la banque de change japonaise pour les services bancaires basés sur les B/A		
	1) Commission de notification de l'A/P		●
	2) Commission de paiement		●
2.	Déchargement et dédouanement au port de débarquement du pays bénéficiaire		
	1) Transport vers le pays bénéficiaire par mer (air) de produits originaires du Japon	●	
	2) Exonération d'impôts et dédouanement des produits au port de débarquement du pays bénéficiaire		●
	3) Transport à l'intérieur du pays entre le port de débarquement et le site		●
3.	Accorder aux ressortissants japonais dont les services pourraient être requis dans le cadre de la fourniture des produits ou dans le cadre du contrat toute l'aide nécessaire pour assurer leur arrivée dans le pays bénéficiaire et y permettre leur séjour afin qu'ils puissent exécuter lesdits services.		●
4.	Exploitation en maintenance correcte et efficace des installations construites et des équipements fournis dans le cadre de la coopération financière non-remboursable.		●
5.	Prise en charge de toutes dépenses, autres que celles couvertes par la coopération financière non-remboursable, nécessaires à la construction des installations et au transport et montage des équipements.		●

Appendix-5 Final Distribution Sites

Region No.	Hand-over site	No.	Item Name	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60						
Region 1	<p>Ministère de la Santé Publique et de la Population / Bangui</p> <p>Vaccines will be handed-over at Bangui INT Airport</p>	<p>End User: Enforced by Central Africa</p> <p>Hôpital Communautaire</p> <p>Hôpital de l'Amitié</p> <p>Centre National Hospitalier et Universitaire de Bangui</p> <p>Complexe Pédiatrique</p> <p>Laboratoire National de Biologie</p>	Refrigerateur(absorption)	1																																
			Refrigerateur(solaire)																																	
			Refrigerateur(28 centres)																																	
			Refrigerateur(38 centres)																																	
			Hôpital Préfectoraux Bangassou / M'bomou																																	
			Hôpital Préfectoraux M'boya / Basse Kotto																																	
			Hôpital Préfectoraux Obo / Haut-M'boouou																																	
			Centre de Santé (28 centres)																																	
			Centre de Santé (38 centres)																																	
			(Total Quantity)				20	10	1	3	20	20	17	15	5	30	10	1	1	1	2	1	2	11,300	255,600	500,000	664,520	166,130	166,130	338,000	140,600	988,900	46,100			
			Region 2	Hôpital Régional / Bouar																																
			Region 3	Hôpital Régional / Bossangoa																																
			Region 4	Hôpital Régional / Bambari																																
Region 5	Hôpital Régional / Bangassou																																			

Appendix-5 Final Distribution Sites

Region No.	Hand-over site	No.	Item Name	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93								
Region 1	Hand-over site Ministère de la Santé Publique et de la Population / Bangui Vaccines will be handed-over at Bangui IHT Airport		End User: Enforced by Central Africa																																									
			Hôpital Communautaire	2	2																																		80					
			Hôpital de l'Amité												120																								120					
			Centre National Hospitalier et Universitaire de Bangui												120																								80					
			Complexe Pédiatrique																																				80					
			Laboratoire National de Biologie																																									
			Direction de la "MFM"																																									
			Laboratoire Central de Ministère																																									
			Service de Lutte Contre les Maladies Endemo Epidemique																																									
			Service de Lutte Contre la Tuberculose																																									
			Service du Programme Elagi de Vaccination																																									
			Direction de la "DSPP"																																									
			Hôpital Préfectoraux Mbaiki / Lobaye	2	3	1	2	2	2	2	2	2	2	2	2	2	2	2	1	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	20		
			Hôpital Préfectoraux Binbo / Ombella-Mpoko	2	3	1	2	2	2	2	2	2	2	2	2	2	2	2	1	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	20		
			Hôpital Préfectoraux Sibut / Kémo	2	3	1	2	2	2	2	2	2	2	2	2	2	2	2	1	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	20		
			Hôpital Préfectoraux Kagabangorou / Nana Gribizi	2	3	1	2	2	2	2	2	2	2	2	2	2	2	2	1	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	20		
		Region 2	Hôpital Régional / Bouar		Centre de Sante (60 centres)																																							
					Hôpital Préfectoraux Berberati / Mambere-Kadei	6	3	1	5	6	6	6	6	6	6	6	6	6	6	6	1	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	60	
	Hôpital Préfectoraux Bouar / Nanamambere			2	3	1	2	2	2	2	2	2	2	2	2	2	2	2	1	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	30		
	Hôpital Préfectoraux Nola / Saangha			2	3	1	2	2	2	2	2	2	2	2	2	2	2	2	1	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	30		
Region 3	Hôpital Régional / Bossangoa		Centre de Sante (38 centres)																																									
			Hôpital Préfectoraux Bossangoa / Ouham	6	3	1	12	12	12	12	12	12	12	12	12	165	12	36	12	36	36	12	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	385		
			Hôpital Préfectoraux Bozoum / Ouham Pende	2	3	1	2	2	2	2	2	2	2	2	2	2	2	2	1	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	20		
Region 4	Hôpital Régional / Bambari		Centre de Sante (28 centres)																																									
			Hôpital Préfectoraux Bambari / Ouaka	6	3	1	5	6	6	6	6	6	6	6	6	6	6	6	1	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	220		
			Hôpital Préfectoraux Ndiélé / Bangingui Bangoran	2	3	1	2	2	2	2	2	2	2	2	2	2	2	2	1	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	30	
			Hôpital Préfectoraux Brao / Haute kotto	2	3	1	2	2	2	2	2	2	2	2	2	2	2	2	1	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	30	
			Hôpital Préfectoraux Brao / Vakaga	2	3	1	2	2	2	2	2	2	2	2	2	2	2	2	1	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	30	
			Centre de Sante (38 centres)																																									
Region 5	Hôpital Régional / Bangassou		Centre de Sante (38 centres)																																									
			Hôpital Préfectoraux Bangassou / M'bamou	6	3	1	5	6	6	6	6	6	6	6	6	6	6	6	1	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
			Hôpital Préfectoraux M'baye / Basse Kotto	2	3	1	2	2	2	2	2	2	2	2	2	2	2	2	1	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
			Hôpital Préfectoraux Obo / Haut-M'bamou	2	3	1	2	2	2	2	2	2	2	2	2	2	2	2	1	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
	Centre de Sante (29 centres)																																											
	(Total Quantity)	50	50	16	2	121	114	114	114	114	114	114	1,490	114	342	114	16	342	342	114	342	342	16	114	224	342	5	1	1	5	1	1	2	2	191	2,800	29	335						

Appendix-6

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