

2) Specification of Major Equipment

Table 2-4

Description	Specification	Purpose of use	Qty
Anesthesia Machine	<p>Anesthesia Apparatus Main unit : Mobile with flowmeter unit, w/Ventilator CO₂ absorber BP meter & top shelf for monitoring equipment Flowmeter : O₂ --- 0.1~10lit./min. NO - 0.5~10lit./min. Anesthesia Ventilator Main unit : With circuit pressure meter, hinged control unit and bellows system. Minute volume : 1 ~20lit./min. Breathing frequency : 5~40times/min. Alarm</p>	<p>Necessary for the general anesthesia using inhalation anesthetic. Combining the function of ventilator it can be used also as auxiliary to the intravenous anesthesia.</p>	9
Biochemical analyzer	<p>No of analytical items : Max. 32 Cycle time : 180 tests / hour Sample volume : 2-30μl Reagent volume : 10-400μl Total volume : 250μl/ test</p>	<p>As multipurpose equipment, this can be used not only for a biochemical test, but also for general examination. It is economical and effective for minimizing a sample. This also can be done for an emergency test.</p>	4
Bottle sterilizer	<p>Type : Free-standing single door cabinet type Volume: 130 liters Chamber size: 445x445x660mm Built-in electric steam generator</p>	<p>This should be used for sterilization of general circulation goods, cold and warm liquid in open vessel.</p>	1
Bronchoscope Flexible & Light Source	<p>View angle : 120° Observation depth : approx. 3~50mm Distal end outer diameter : approx. 5.8mm Bending angle : approx.UP180° / DOWN130° Soft part outer diameter : approx. 6mm Working length : approx. 550mm</p>	<p>Used in thoracic surgery, internal medicine and otorhinolaryngology for diagnosis and observation of bronchial lesions and removal of matter.</p>	4
Bronchoscope, Pediatric	<p>View angle : 120° Observation depth : approx.3~50mm Distal end outer diameter : approx.4.9mm Bending angle : approx.UP180° / DOWN130° Soft part outer diameter : approx. 5mm Working length : approx. 550mm</p>	<p>Used in thoracic surgery, internal medicine and otorhinolaryngology for diagnosis and observation of bronchial lesions and removal of matter.</p>	1

Description	Specification	Purpose of use	Q'ty
Colono fiberscope for child	View angle : 120° Observation depth : approx.3~100mm Distal end outer diameter : approx.11.2mm Bending angle : approx.UP180° / DOWN180° Soft part outer diameter : approx. 11.3mm Working length : approx. 1,330mm	Used for diagnosis and treatment during and after operation, and mainly for direct observation of bile duct and for removal of choledocholith.	1
Defibrillator	12 Lead, with ECG Out put : 3~360J. Monitor : 5~5.5inchi Battery : Built-in Power source : AC/DC	An equipment used to recover the rythm intrinsic to the heart, flowing endermically DC current into the ventricle which fibrillates most frequently leading to cardiac standstill. Essential equipment in any general hospitals.	3
Delivery table	Dimensions : Height - Adjustable from 65cm to 92cm Wight - 80cm Length - 170cm including the auxiliary table. Positions : Trendelengurg 13° , Reverse trendelenburg 7° . Back section tilts up 35° and down 7° . Seat section tilts up 35° and down 8° .	Special equipment used for a delivery. For both doctors and pregnant women, one whose height and slant can be adjustable should be selected.	13
X-Ray Unit, for Screening Room	X-ray generator Remote control type R/F table TV monitor system X-ray tube	Will be an advanced system capable of fluoroscopical examination of skeleton, head, chest, abtomen, and soft tissues, etc.	4
EEG	Number of channels : Total 10 channels plus 2 marker channels Recording speed : 5, 20, 30mm/sec Number of electrodes : 32 Automatic measurement :Automatic measurement according to programmed contents is possible. Display : A large LCD and LEDs	This is used as a support diagnosis instrument to check how the function of the central nervous system is for cases such as cerebral blood vessel disorder, injury of the head, brain tumor and epilepsy.	3

Description	Specification	Purpose of use	Qty
Electrosurgical Unit	Output : Cutting, Coagulation, Blend, Bipolar Output indication : Digital indication Cutting : 0~350 W Coagulation : 0~130 W Blend : 0~250 W Bipolar : 50 W	An essential tool for operating room, that is used when dissecting the living structure of patients in an operation, when performing hemostatic dissection and for coagulation.	10
Extractor for laundry	Capacity : 25 KG/ LOAD Cylinder : 660mm Φ × 300mm L Cylinder volume : 0.10m ³ Speed : Extract 1,250 R.P.M.	This is used for drying linen such as sheets, towels and medical clothes. A small type with capacity of 30 kg should be selected.	5
Gastrointestinal fiberscope, Pediatric	View angle : 120° Observation depth : approx. 3~50mm Distal end outer diameter : approx. 5.3mm Bending angle : approx. UP180° ,DOWN180° Working length : approx. 925mm	Used for examination of upper gastrointestinal tract, resection of polyps, hemostasis, and removal of foreign matter.	4
Glassware washer	Type : Single door, free-standing cabinet Volume: 200 liters Size : Door opening-550x590mm Depth-620mm Program: available	This equipment will be used to sterilize glass apparatuses and instrument which are circulated at the hospital.	5
Autoclave (Flash) (150l. self-generator)	Control : microprocessor Sterilizing method : by steam Cycle indication : LED Temperature indication : digital Interior capacity : approx. 160 liters Safety : when the door opens and closes	Used for autoclaving of operating gowns and operating tools.	4
High pressure steam sterilizer	Type : Vertical cylindrical chamber w/ hinged lid Volume: 55 liters Size : Diam. 330 x depth 550mm Electric steam generator, equipped	A small capacity type should be selected for the preparatory room of operation theater. It should be used for sterilization of general circulation goods in hospital.	1
Ventilator, Infant	Mode : CPAP, CMV, PTV, SIMV, Alarm test Tidal volume : 1~125 or 126~250BPM I : E ration : 9.9:1 to 1:9.9 O ₂ blender : 21~100% O ₂ ± 3% Display : Digital Alarm : No air and no oxygen, no battery, etc.	Used for assisting in spontaneous breathing or for forced, controlled respiration of an infant .	5

Description	Specification	Purpose of use	Qty
Laparoscope with Video Facility	View angle : approx. 70° Imagesize : 40mm diameter Working length : approx. 290mm Outer diameter : approx. 5mm With monitor	Used in Internal medicine and gynecology - obstetrics for diagnosis and surgical operation on intraperitoneal lesion .	2
Light source for fiberscope w/suction	Light Source Illumination Lamp : Xenon lamp Lamp life : approx. 300hrs. Emergency Lamp : Halgen lamp Suction Pressure range Operational : 700-1060mbar Storage : 238-1060mbar Pump vacuum : -85kPa, ± 10% Jar capacity : approx. 3 l	This is necessary equipment when using a fiber scope. In order to be extremely precise for examination, a xenon type was selected.	5
Operating lamp, ceiling type	Lamp housing (Main) : approx. 75dia. 8 bulbs or more (Auxiliary): approx.60d.a. 6 bulbs Light source : Halogen bulb Light Intensity (Main) : 140,000 lux. (Auxiliary): 100,000 lux. Color temperature : 4,000 ± 250K	This is an indispensable appliance for the operation room. Specification should be selected one combined with a hanging-type main lamp and a support lamp which can be used even in case of big operation.	5
Operating Table for General Surgery	Dimensions : 1,810 × 525mm Height adjustable : 780 mm to 1,130mm Trendelenburg : 45° Lateral tilt : 30° both sides Back section : 90° up and 40° down Gear manual controlled	Desirable is to adopt such operating table as can allow for general surgery in large operating rooms and enable to hold most comfortable posture for the patients.	10
Bedside Monitor	Waveform display of ECG, non-invasive blood pressure, and respiration curve, Numerical display of heart rate, blood pressure, temperature, and respiration rate.	An equipment required for monitoring the heart function of the patients after operation and the heart function of the patients in intensive care units over a certain period.	17
Spectrophotometer	Programs : Full step programmable type Wavelength range : 190 to 1,100nm Wavelength setability : 0.1 nm increment Photometric readout : -0.300 to 3.000A, or 0.0 to 200.0 %T Photometric accuracy : ± 0.005A	This is used for blood biochemical analysis at the time of clinical test. Since it is difficult to handle a large quantity of tests, it is used 1) at facilities where fewer tests are conducted, 2) for test items to be done in a few times, 3) for test items which cannot be done automatically.	5

Description	Specification	Purpose of use	Qty
Surgical instrument set (Big & Small)	Operating scissors ; str. blunt & blunt Tissue forceps, Dressing forceps, Kocher hemostatic forceps, Mayo- hegar needle holder, Nakahara's aneurism needle, Langebeck retractor, Flexible spatula, Abdominal retractor	Operation tools which can be used for general surgery operation will be arranged.	10
TV monitor set for endoscope	TV system : PAL Video signal output : V.B.S. - 1 terminal Y/C - 2 terminals RGB - 1 terminal Color adjustment : Red \pm 8 steps Blue \pm 8 steps	By displaying a part diagnosed on a TV monitor, precision of an endoscope can be maintained high. This is also a necessary instrument at medical schools for practices and training of doctors.	1
Ultrasound Machine, White & Black Doppler	Indication mode : B, M, B/M, B with White & Black doppler Monitor : 12 inches Scanning technique : electronic convex, electronic linear	Used for general ultrasonic inspection and for early diagnosis of pregnancy.	5
Ultrasound apparatus, portable w/ Cart	Scanning Methods : Electronic convex, Electronic linear Depth of display : Max. 20cm Operating / Display Modes : B, B/B, B/M, and M	This is used for pregnancy diagnosis and its progress diagnosis. A portable type should be arranged.	5
Cystoscope	Telescope Direction of view : 12° , 70° , 30° Outer dia. : approx. 4mm Working length : approx. 280mm Autoclavable	A rigid type scope. This is used for examination and diagnosis of urethra and urinary bladder.	3
Respirator	Volume control type. With integrated compressor. Compatible with IMV, CPAP and PEEP.	For assistance of patients showing spontaneous respiration and those requiring forced ventilation.	2

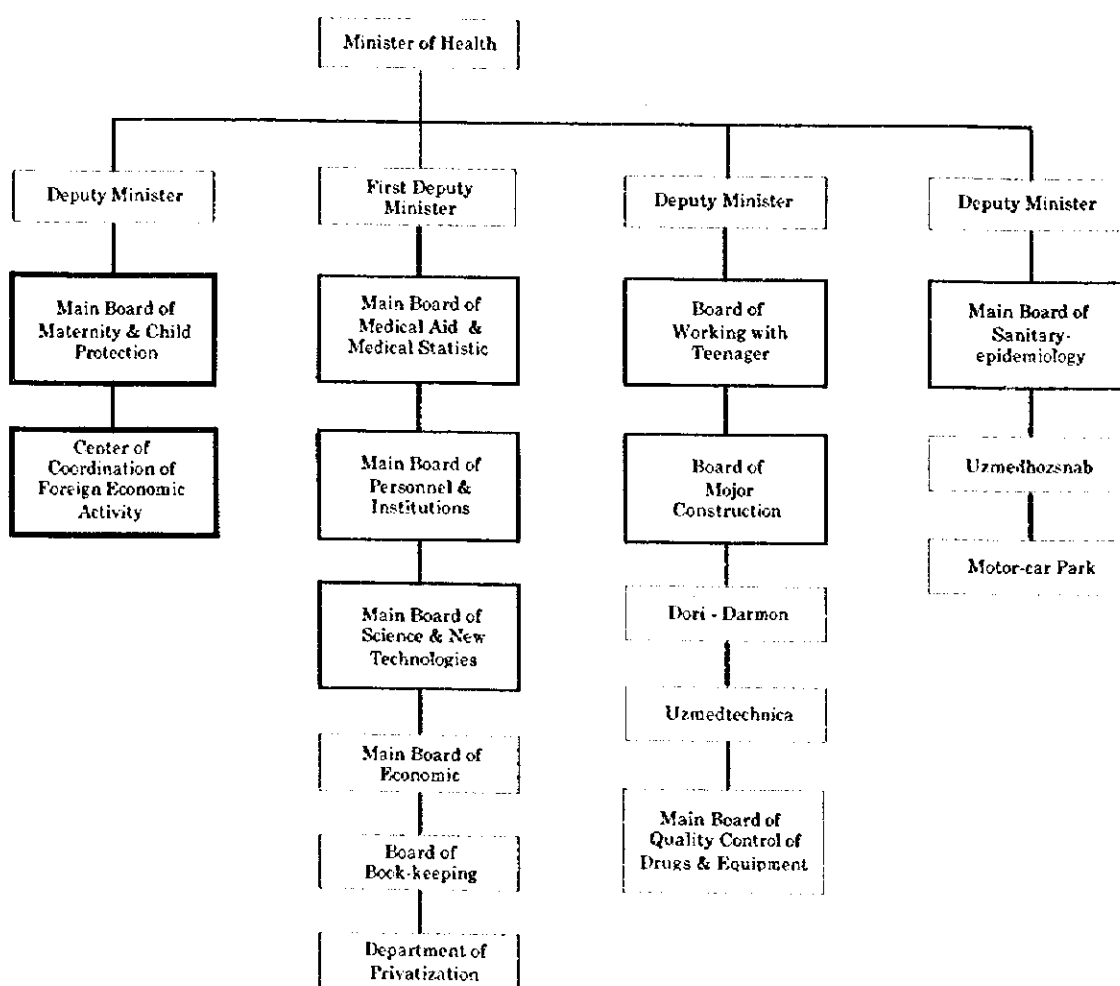
2-4 Implementation System of the Project

2-4-1 Organization

(1) Implementation Organization

1) Responsible Agencies

The Ministry of Health of the Uzbekistan Government is the responsible agency of the Project; and the MCH Office is in charge of supervising the Project implementation. The External Economic Cooperation Center is the division to contact for external communication.



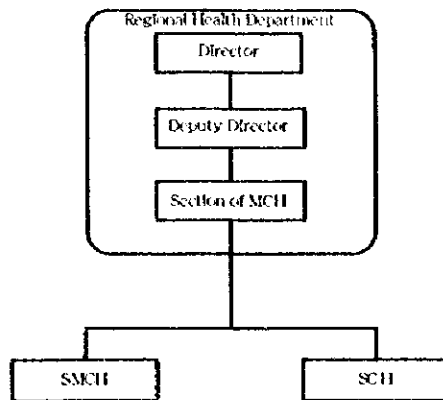
Note) Dori-Darmon and Uzmedtechnica are a semi-governmental body, however both of them are controlled by MOH.

Figure 2-2 Organization Chart of MOH

2) Operation and Supervision

The Samarkand and Navoi Regional Health Offices are the agencies responsible for operation and supervision of the Project from the Uzbekistan side. Relationship between Regional Health Offices and designated hospitals is Figure 2-3.

-1 Samarkand Region



-2 Navoi Region

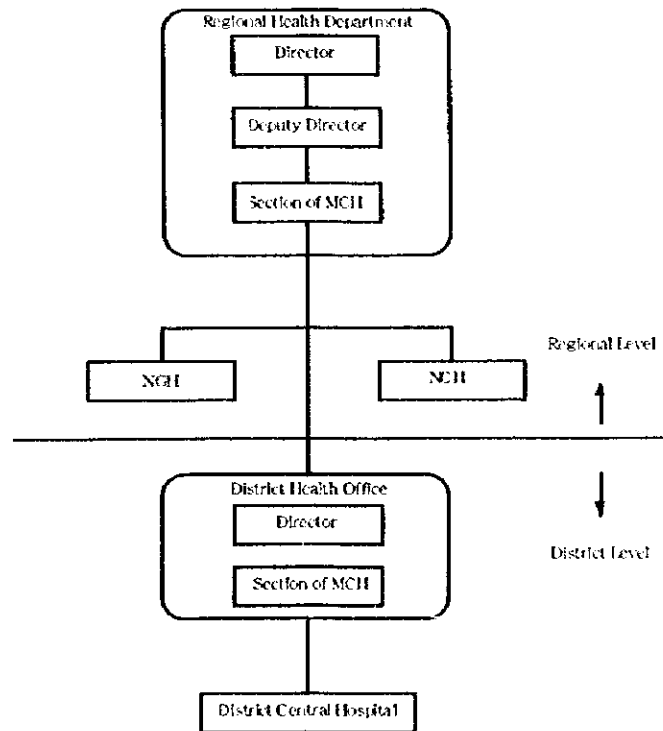


Figure 2-3 Organization Chart of Regional Health Office

2-4-2 Budget

(1) Ministry of Health

The trends of the budget of the Ministry of Health after the independence are shown in the following table. The health care budget has been increasing by ranging from 100% to 720% for the past five years: Approximately US\$237 million or approximately 29.6 billion yen in 1996. Increase of the budget is influenced by the recent inflation accounting for 30% to 80%, at the same time it is because the Government of Uzbekistan has been focusing on the improvement of national health care. The MOH budget accounted for more than 10% of the national budget in 1994, which reveals that the government has been emphasizing the health care administration.

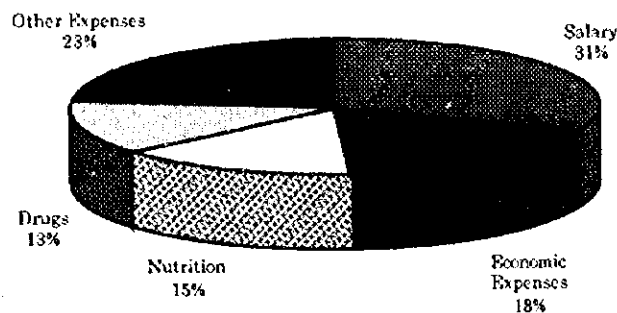
Table 2-4 Change of the MOH budget

(million sum)

	1991	1992	1993	1994	1995	1996
MOH	282	20.40	200.90	2,149.30	9,864.30	18,992.20
Growth Ratio against previous		724%	1029%	1024%	450%	193%
% in the National	8.60%	NA	NA	10.50%	NA	NA

Source : Ministry of Health

However, the health care budget are allocated mostly for labor costs, general expenditures and food, while it is little for purchase of reagents and purchase of medical equipment, 13% of the total budget (approximately US\$30.86 million or 3.86 billion yen) and 1% (approximately US\$2.37 million or 0.3 billion yen) respectively. Therefore, it is so difficult to purchase or renew medical equipment independently that the country has no choice but to rely on foreign assistance such as UNICEF and GTZ.



Source : Ministry of Health

Figure 2-4 Budget Allocation

(2) Regional Health Department

The budget of the Regional Health Department of the two Regions are shown in the following table. As for the operation, maintenance and management budget after the completion of the Project, special budgets will be provided by the Samarkand Regional Government at US\$100,000 and the Navoi Regional Government at US\$150,000 respectively.

Table 2-5 Budget of Regional Health Department

(million Cym)

	1991	1992	1993	1994	1995	1996
DOH Budget of Samarkand	NA	1.78	18.14	191.53	918.42	1,591.12
DOH Budget of Navoi	NA	4.20	6.30	69.60	360.30	517.00

Source : Samarkand and Navoi Regional Health Department

(3) Designated facilities

The budget of 1996 and the breakdown of the designated hospitals are shown in the table below. Operational costs for each hospital are allocated from the budgets of MOH and the Regional Health Offices. Since introduction of hospital's income system is at a pilot stage, the income by doctor's fees is small.

Table 2-6 Budget results of the Designated Facilities for the Past Four Years

(Unit: '000 Cŷm)

	1994	1995	1996	1997 (Jan.-Aug.)	*Increase rate
SCH	6,400.0	10,903.1	20,158.3	14,350.0	299%
SMCH	2,557.0	6,205.5	11,414.0	9,723.7	507%
NGH	7,351.5	5,886.5	8,855.3	8,455.0	153.3%
NCH	-	-	(Nov.-Dec.) 7,000.0	12,142.5	N.A.
NKDH	6,960.0	4,297.0	7,961.9	8,984.0	172.1%

* The increase rate for the past four years was calculated by converting the 1997 result into 12 months.

Note) NCH was newly opened in October, 1996.

The increase rate of the budgets for the past four years has showed very high compared to the MOH budget, and it indicates that the improvement of the functions of the designated facilities has been the significant issue of the health care policies in Uzbekistan. Also, the budgets of SCH and SMCH have been increasing largely compared to that of NGH and NKDH, which appears that the country regards the improvement of mothers and children's health as of importance.

Table 2-7

(thousand Cyn)

	SCH	SMCH	NGH	NCH	NKDH
{Budget}					
① Regional Government	20,643.3	11,309.4	8,855.3	7,000.0	7,961.9
② Pay	101.2	-	-	-	-
③ Donation	21.0	50.0	-	-	-
④ Other	-	-	-	-	-
Total Budget	20,765.5	11,419.4	8,855.3	7,000.0	7,961.9
[Expenditure]					
① Personnel	7,381.2	5,331.3	3,050.0	2,500.0	3,304.4
②	2,839.9	1,193.6	52.0	1	474.5
③ Administration	1,568.7	2,321.8	97.4	1	37.0
④ Travel Fee	368.8	1,289.6		1	95.6
⑤ Food	5,183.9	1,197.7	1,437.5	1,000.0	838.2
⑥ Facility	632.5		31.2		17.0
⑦ Medical Equipment	2,183.3			200.0	14.0
⑧ Other		80.0	4,187.2	3,300.0	10.9
Total Expenditure	20,158.3	11,414.0	8,855.3	7,000.0	4,851.6

Source : MOH, the Samarkand and Navoi Regional Health Departments

Budget for each medical facility is allocated according to its range of medical activities and the number of beds. Fixed expenses such labor costs and patient food account for 60 to 70% of the budget. Therefore, facility operational costs such as reagents, medical equipment and maintenance are always insufficient.

2-4-3 Project Staff and Technical Level

(1) Medical education

In Uzbekistan, 7 medical institutes and each medical department of 3 universities are providing the medical education for the doctor course, from which approximately 4,400 persons are graduated annually. Meanwhile, there are 48 vocational schools for medical workers such as nurses, paramedical and phamaceutists, where approximately 21,300 students are trained each year.

(2) Allocation of the staff

Each of the designated hospitals overemploys medical staff compared to the number of beds. Even if considering the relationship with the employment promotion policy of the Government, the Health Development Plan has the policy of "decrease of surplus employees." Therefore, the plan of decreasing the staff members should be promoted in order to operate the hospitals with the proper number of staff.

(3) Technical level of the medical staff

1) Medical doctor

The designated hospitals of the Project except NKDH are the referral hospitals in the Samarkand and Navoi Regions. All of them play an important role to function as the base for improving MCH services. They hire the higher-level experts whose expertise is similar to that of the university professor and then provide education and training for medical staff of the lower-level medical facilities, medical students, nurses, technicians etc. Their medical knowledge is very high and there are only very limited constraints with them.

2) Nurses

In Uzbekistan, the nurses are being thought better of. The WHO-recommended nursing education curriculum "Lemon Project" is introduced into its nursing education, the Government has just started qualitative improvement of it.

The nurses are expected to understand the importance of nursing, medical knowledge, utilization of medical equipment, etc. not only working as assistants of the doctors.

Therefore, the following extension of understanding the importance of nursing, it is expected that various services will be improved in the equipment and facilities, human resources, etc. in the hospitals.

3) Paramedical

Equipment to be procured are mainly intended to renew and supplement the existing equipment, therefore, there will be no technical problem in operating equipment including X-ray machine. In terms of equipment like biochemical analyzer which require special training for operation, there will also be no problem in utilizing equipment because staff in charge of handling equivalent equipment which were procured under the "Project for Improvement of Medical Equipment for Child Care" in 1994 will instruct how to use the newly procured equipment.

Chapter 3. Implementation Plan

CHAPTER 3. IMPLEMENTATION PLAN

3-1 Implementation Plan

3-1-1 Implementation Concept

This project will be implemented officially in accordance with the grant aid framework of the Government of Japan after approval of both Japanese and Uzbek Governments and the conclusion of exchange of notes (E/N). Prior to the implementation, a Japanese consultant company will be selected by the Uzbek side, and the detail design work of equipment will start. After completion of the detailed design, a Japanese equipment procuring company which will be chosen by tender for the project will implement actual work of equipment procurement and installation. The contracts on the consultation and the equipment procurement will come into effect after approval of the Government of Japan.

For the implementation of the project conducted within the framework of the Japan's grant aid, the following items should be considered:

- (1) The work schedule should be confirmed by both Japanese and Uzbek staff in charge. Both sides should clarify the scope of work and the starting and completion dates to avoid setting complicated construction plans.
- (2) In order to shorten the construction period as much as possible, the equipment procuring company must investigate designated facilities two months before delivery of equipment. The company also must check delivery routes, power supply, water supply and drainage, and prepare a bringing-in schedule.
- (3) It needs a long period for installation and bringing-in since there will be five designated medical facilities in two provinces, and if the construction work takes longer time than expected and is done in the coldest season, it may be difficult to do foundation work including ground concrete work. Therefore, plural (2 or 3) installation teams will be sent in order to shorten the

construction period.

- (4) As for foundation work for X-ray machines and laundries which should be shouldered by Uzbekistan, accurate estimates of installation work should be submitted to the Uzbek Government immediately after types of equipment are decided so that the Uzbek side can make a budget plan and any delay of the work due to unfixed budget can be avoided.
- (5) An instruction and training seminar will be held for Uzbek engineers, at which operation and maintenance methods for main equipment will be taught by the procuring company.
- (6) As for large-size medical equipment such as X-ray machines, ultrasound apparatus and biochemical analyzers procured by a third party which need maintenance, each manufacturer of the equipment or sales engineers of the procuring agents will give instruction in installation and maintenance.
- (7) As for equipment procured in Japan, Japanese engineers specializing in electronic medical equipment and general medical equipment will give instruction in installation and maintenance.

3-1-2 Implementation Conditions

Taking into account that the designated facilities are the medical facilities in practice, the procurement schedule, routes, places for safekeeping and delivery and installation procedures should be duly considered through the consultation with each designated facility so that the daily medical activities may not be disturbed. Especially in case of renewal, sufficient consultation should be made to avoid long unavailability of the equipment caused by the removal, and prompt installation will be required for the stable medical activities.

3-1-3 Scope of Works

- (1) The scope of responsibility of the Japanese side in accordance

with the grant aid scheme of this project covers the procurement and subsequent installation of medical equipment for the five medical facilities. The scope is limited to as described below:

1. The equipment that is shown in the aforementioned equipment plan list.
 2. Ocean transport and land transport expenses and domestic transport expenses to the designated facilities.
 3. Expenses for installation of equipment (expenses for dispatch of engineers, local workers, tools, and measuring meters).
 4. Expenses required for carrying out test runs, guidance for operations, inspections and maintenance management relating to the whole procured equipment.
- (2) Items to be shouldered by the Uzbek Government
1. During the implementation period of the project, the Uzbek side should accommodate a place to use for a temporary office for this project in each designated facility.
 2. The infrastructures (electricity, water supply, drainage, and other facilities) needed for the project should be provided or improved before installation of the equipment, and the existing equipment should be removed from places where the new equipment will be installed.
 3. The equipment that will be imported for this project should be unloaded without delay, and necessary conveniences for customs clearance and domestic transport should be provided.
 4. Payments of customs duties and other taxes should be exempted for the Japanese people who reside in Uzbekistan to implement this project.
 5. With respect to the bringing-in of equipment and the service provision required for the implementation of the project by the Japanese people, necessary conveniences for their stay in

Uzbekistan should be provided and sufficient considerations should be taken for their security as well.

6. In accordance with the agreement with banks concerned, the Uzbek side should pay bank handling charges and the payment authorization commission to the designated Japanese bank that handles the foreign exchange.
7. The equipment procured through the grant aid should be maintained properly and used effectively. For this purpose, necessary budget and personnel should be assured.

3-1-4 Consultant Supervision

(1) Implementation system

This project is implemented by the following four parties:

1) Project implementing body

The implementing organization for this project is the Department of Health of the Uzbek Government, and the designated facilities of the project are five medical facilities. The director of the department of Health is in charge of actual work of the project.

2) Consultant

Since the project is implemented under the Japanese grant aid program, it is stipulated by its rule that a Japanese consultant gives instructions, advises, and coordinates from a fair standpoint throughout the steps of design, tender, and implementation based upon the contract with the implementing organization of Uzbekistan. Besides the consultant performs necessary work for smooth implementation of the project.

The specific tasks are as follows:

- * Detailed design

Preparation of tender documents for equipment procurement (tender conditions documents, equipment specifications and budget reports).

* Promotion of tender and procurement contract

Decision on the procurement contract system, preparation of procurement contract draft, examination on the contents of equipment installation work report, and selection of procurement agents (public announcement of tender, tender and tender evaluation, contract negotiation and contract witnessing).

* Inspection and approval of work execution drawings

Inspection and approval of equipment specifications reports, work execution drawings, and work execution plans submitted by the procurement agents.

* Report on work progress

Report on progress of work execution to the implementing body and the related organizations.

* Cooperation in payment approval procedures

Investigation of bills relating to the remuneration to be paid after shipment and cooperation in these procedures.

* Consulting work

Witnessing of various works from the beginning through the completion.

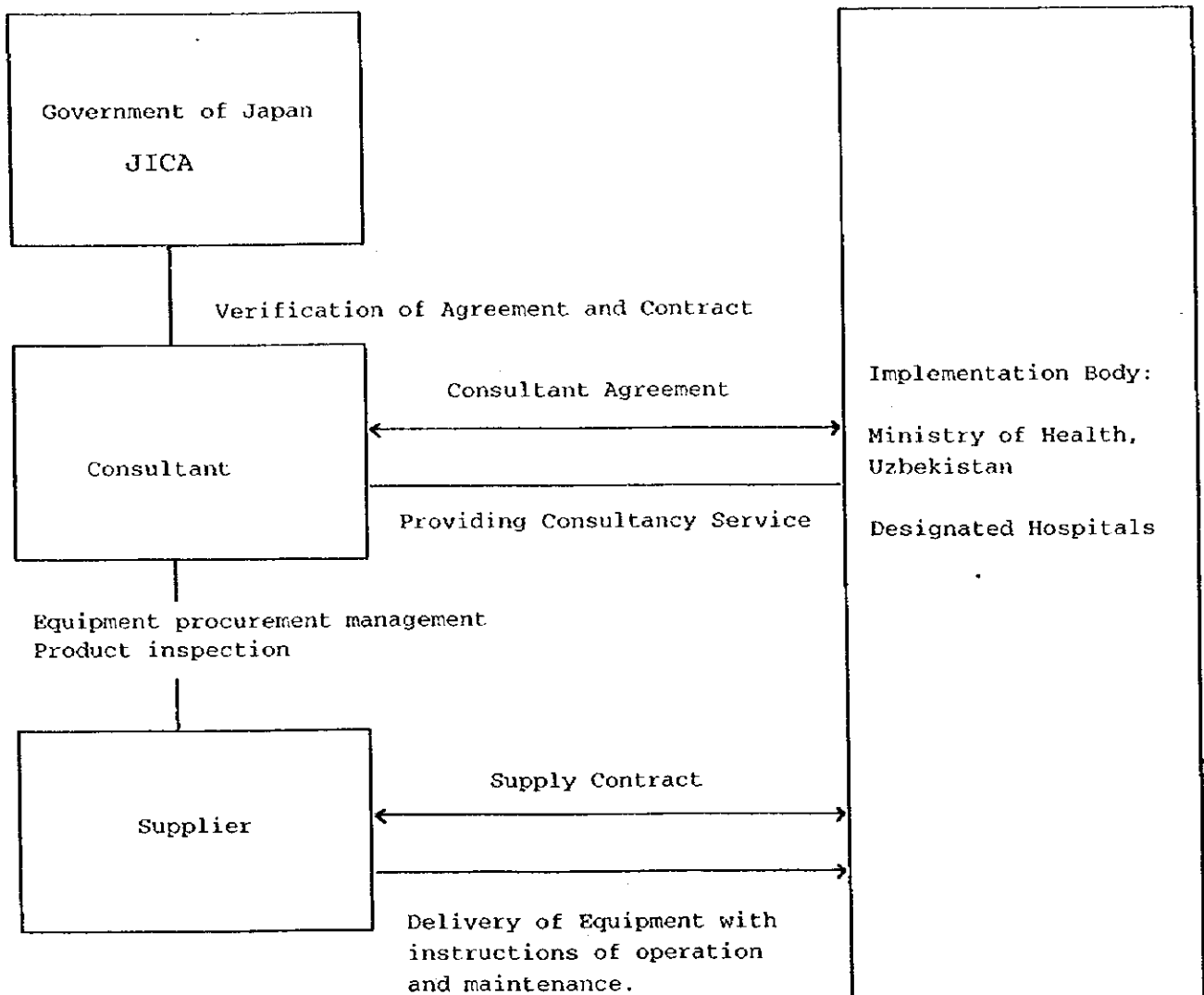
3) Equipment procurement agent

Procurement of equipment is implemented by a Japanese agent (trading company) who will be selected by tender. The agent, based upon the contract with the Uzbek side, is responsible for manufacturing, supply, bringing-in, and installation of equipment, and gives instructions on equipment operations and maintenance management to the Uzbek side before delivery.

4) JICA

Japan International Cooperation Agency (JICA) leads the consultant and the procurement agent so that the project can be implemented properly in accordance with the Japan's grant aid system. Moreover, JICA consults with the implementing organization as required to further the project.

Implementation Flow Chart



(2) Implementation design and supervision

The consultant, based on the contract with the Uzbek side, performs the implementation design and supervision for the project. The implementation design is made to determine detailed specifications and prepare the tender documents comprised of specifications, tender guidance, draft of equipment procurement contract, etc. based on the basic design study. The supervision is made to assure that the work of the procurement agent is implemented in accordance with the contract, and to give instructions, advice and coordination from a fair standpoint to promote the project.

The supervision consists of the following:

1) Stage of implementation design

Preparation of implementation design documents, tender, and contract documents.

2) Stage of tender

Prior screening of tenderers, implementation of tender, evaluation of the contents of tender, and conclusion of contract.

3) Stage of work execution

Supervision of work execution (inspection and approval of equipment specifications, supervision of shipment, ocean transport, and inland transport, instructions and supervision of installation, and supervision of work to be shouldered by the partner country), report on the work execution progress, and issuance of certificates. (Upon confirming that the equipment installation is completed and the contract conditions are conformed, the consultant witnesses delivery of the equipment and completes its duty after obtaining acknowledgment of receipt of the equipment from the Uzbek side.)

Besides the above-mentioned work, the consultant reports on the

progress, payment procedures, and completion of delivery, etc. to those concerned of the Government of Japan.

(3) Personnel plan

Those who will be engaged in the consulting operation for the implementation design and the supervision of the work execution are as follows:

1) Project manager: 1 person

The project manager will supervise the whole consulting operation.

2) In charge of medical equipment plan: 1 person

The person in charge of medical equipment plan will analyze the planned equipment and make out specifications.

3) Cost estimation : 1 person

The cost estimator will confirm total costs of the project and check the designated facilities for maintenance, follow-up and other necessary procedures.

3-1-5 Procurement Plan

(1) Procurement of equipment

Equipment applied to the following items will be procured by a third country, i.e. a country in Europe or the U.S.

1) Equipment generally used at the designated facilities, with which Uzbek medical personnel are familiar.

2) Medical equipment manufacturers and agents handling the equipment have their own maintenance network and offer a reliable maintenance system in Uzbekistan or in Moscow.

3) Replacement parts and consumables of the equipment are

available on site.

Other equipment should be selected after examining reliability of delivery date and appropriateness of procurement prices.

Equipment to be procured by a third country

Equipment	Expected Country
X-ray Machine	Europe, the U.S.
Biochemical Analyzer	Europe, the U.S.
Bottle Sterilizer	Europe
High Pressure Steam Sterilizer	Europe
Ventilator for Child	Europe
Spectrophotometer	Europe, the U.S.
Ultrasound Apparatus	Europe, the U.S.

(2) Method to bring in the medical equipment

Procured equipment will be transported to the Lianyungang Port by sea and to Tashkent by train, and then to Samarkand and Navoi by land. Equipment procured by a third country will be once collected in Hamburg and transported to Tashkent by train, and then to the designated medical facilities. In order to protect from damage and robbery, the equipment will be packed by containers on each site: the Lianyungang Port and Hamburg.

3-1-6 Implementation Schedule

(1) Implementing process

When this project is approved by a Cabinet meeting of the Government of Japan and the Exchange of Notes (E/N) relating to the implementation is concluded between both relevant countries, the project will be carried out in the following procedures:

1. Conclusion of the E/N between both governments.
2. Conclusion of agreement between the implementing organization and Japanese official foreign exchange banks on payment of the grant aid fund from the Japanese side required for the project

(Banking Arrangement).

3. Conclusion of the consultancy contract between the implementing organization and the Japanese consultant.
4. Payment by the implementing organization and issuance of authorization to pay for the consultancy.
5. Verification of the above contract and approval of payment by the Government of Japan.
6. Implementation design and preparation of tender documents by the consultant.
7. Approval of the tender documents by the implementing organization and preparation of tender by the consultant.
8. Implementation of the tender and evaluation of the tender documents.
9. Conclusion of agent contract (sales contract) relating to equipment procurement between the implementing organization and a Japanese trading company.
10. Verification of the above contract by the Government of Japan.
11. Issuance of authorization to pay according to the agent contract (sales contract) by the Department of Health of the Uzbek Government.
12. Approval to manufacture of equipment and work execution drawings (The consultant examines and approves specifications to be submitted by equipment suppliers, gives necessary instructions, and coordinates through close contacts with the Department of Health in order to execute the work smoothly).
13. Equipment witnessing inspection. (The consultant witnesses factory inspection before shipment as required and approves the inspection as the proxy of the Department of Health of the Uzbek Government).
14. Work execution management. (In accordance with the contract, the consultant as the proxy of the Department of Health scrutinizes and approves the specifications, inspects and approves the equipment, supervises shipment and inland transportation, instructs the installation, and supervises work execution shouldered by the partner country.)
15. Progress management (The consultant supervises work progress

so that the equipment procurement contract can be completed within the period stated in the E/N, and gives necessary directions to the supplier.)

16. Final inspection and test runs (The consultant conducts work completion inspection and commissioning of the procured equipment, confirms the performances described in the specifications, and submits a certificate of completion to the Department of Health of the Uzbek Government).

17. Completion and delivery

(2) Period of implementation

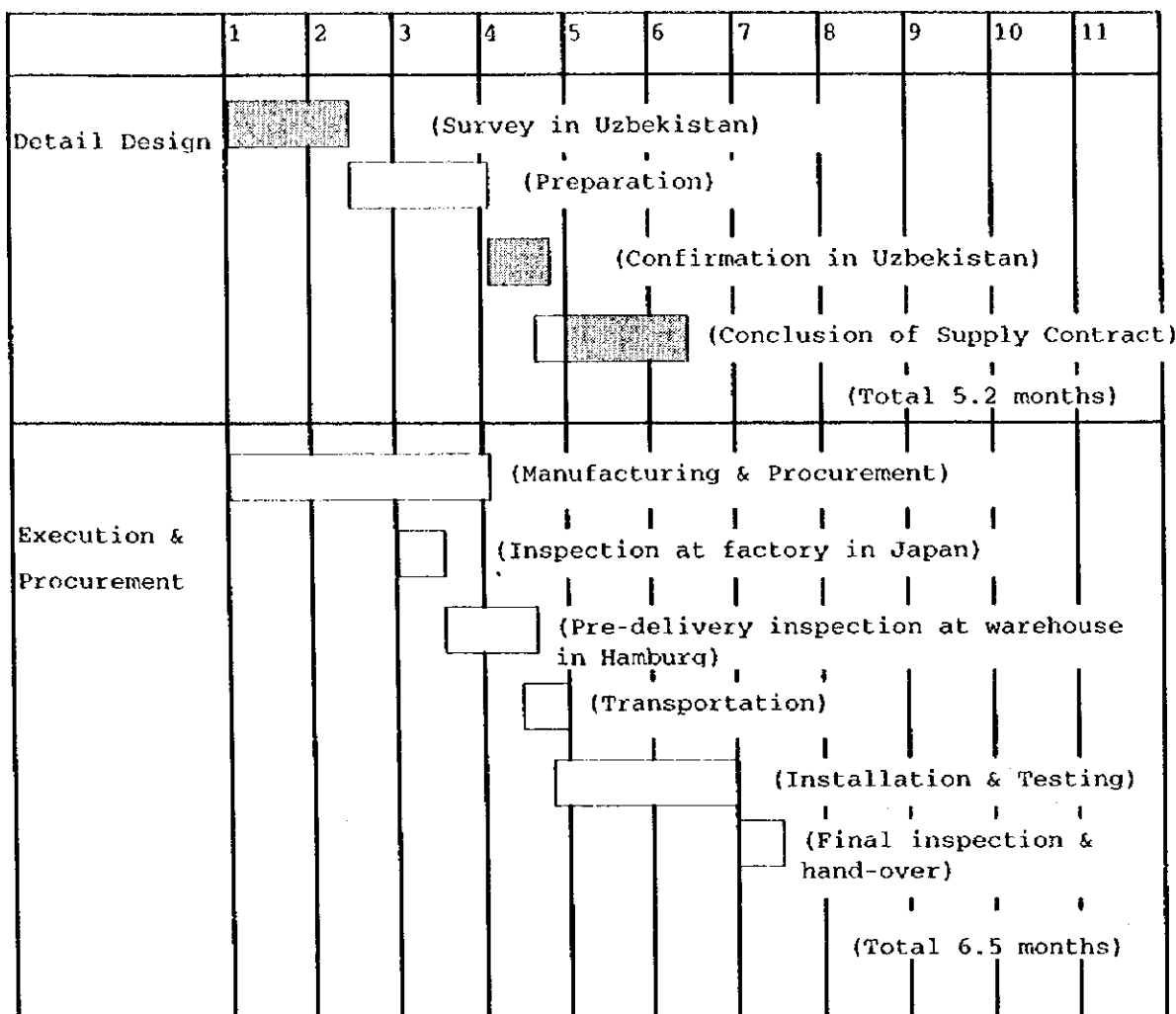
After the conclusion of the E/N, the period required for each task on the Japanese side is roughly as follows:

Table 3-1 Period of Implementation and content of work

Content of Work	Phase I
1. Conclusion of consultancy agreement and discussion of detail design	Approx. 1.3 month
2. Preparation of detail design and of tender documents	1.8
3. Approval of tender documents	0.8
4. Tendering, Conclusion of Contract and Approval	1.3
5. Manufacture of equipment	3.0
6. Transportation	0.5
7. Installation (including an initial test, adjustment, operation guidance, training, maintenance instruction and confirmation of hand-over)	3.0
Total	11.7 month

The work progress chart is the following:

Figure 3-1 Work execution



3-1-7 Obligation of the Recipient Country

For the implementation of this project, Uzbekistan is required to undertake the following necessary measures:

- (a) To provide a temporary office in the site during the implementation of the project.
- (b) To provide infrastructures of electricity, water supply, drainage, etc. before the installation of the equipment and remove the existing equipment putting in a place where new equipment will be

installed.

- (c) To ensure prompt execution for unloading, customs clearance at the port of disembarkation and internal transportation for the equipment.
- (d) To exempt Japanese nationals engaged in the project from customs duties, internal taxes and other fiscal levies which may be imposed in Uzbekistan.
- (e) To offer necessary conveniences to Japanese nationals who stay in Uzbekistan in order to conduct services under the verified contracts including bringing-in of the equipment, and to ensure their safety.
- (f) To pay the following commissions to a Japanese bank handling foreign exchange based upon the Banking Arrangement (B/A).
 - Handling charge
 - Advising commission of the "Authorization to Pay (A/P)"
- (g) To secure a budget and assign appropriate personnel in order to implement the project effectively (including maintenance costs).
- (h) To maintain and use the equipment purchased under the grant aid program properly and effectively, and to report its condition to the Government of Japan on a regular basis.
- (i) To bear all the expenses other than those to be borne by the grant aid within the scope of the project.

3-2 Project Cost Estimation

3-2-1 Estimated Operational Costs

(1) Costs shouldered by the Government of Uzbekistan

It costs US\$9,300 (equivalent to Japanese Yen 1.10 million) as repair work of the X-ray Room.

FACILITY	AMOUNT
Samarkand Regional Children's Hospital	\$1,850.00
Samarkand Regional Health Care Center for Mothers and Children	\$2,550.00
Navoi Regional Hospital	\$2,200.00
Khatyrchi District Central Hospital	\$2,700.00
Total:	\$9,300.00

3-2-2 Maintenance and Management Plan

(1) Maintenance plan

The equipment provision of the project aims at replacing the existing equipment which have been getting too old to use and supplementing the insufficient equipment. Therefore, there will be only a few operational and technical constraints in maintenance and management after installation of the equipment.

(2) Maintenance budget

Maintenance costs for replacement parts, consumables and maintenance are in Table 3-2-2.

Table 3-2-2 Estimated maintenance costs

Project Site	Operation & Maintenance Cost (Yen)
① SCH	2,694,000
② SMCH	2,730,000
③ NGH	2,680,000
④ NCH	2,480,000
⑤ NKDH	930,000

Annual maintenance costs amounting to approximately 5 to 6 million yen were allocated to each designated facility in 1996. Maintenance costs after the implementation of the project will increase by around 43% on average, by 20% at least. However, operational costs for the designated facilities except Navoi Children's Hospital which was established in 1996 have been increased by 70 to 300% for the past four years and an estimated increase rate after implementing the project will account for 0.038% of the 1996 total MOH budget, US\$237 million (approximately 29.6 billion yen). Therefore, it can be judged that the maintenance costs will be shouldered by the Government of Uzbekistan. Furthermore, MOH promised to increase the budget because the designated facilities are top referral hospitals in the areas and the Samarkand and the Navoi Regional Governments promised to provide special budgets of US\$100,000 and US\$150,000 per year respectively. The budgets will be used for covering the increase of the maintenance and management costs caused by the project. Therefore, the Uzbekistan

side does not have any problem in terms of the increase of operational and maintenance costs.

Chapter 4. Project Evaluation and Recommendation

CHAPTER 4 PROJECT EVALUATION AND RECOMMENDATION

4-1 Project Effect

4-1-1 Demonstration and Verification of Appropriateness

Beneficiaries of the project will be mothers and children living in Samarkand and Navoi, with population of 1.3 million and 1.5 million respectively. By improving medical equipment for the designated hospitals under the project and by using the equipment effectively, health care services for mothers and children in these areas will be reinforced. It also contributes to the improvement of the population's health mainly for mothers and children, combining with the ongoing "Mothers and Children's Health Improvement Plan."

The project is mainly intended to renew the existing equipment of the designated hospitals, therefore, there will be no technical problems in terms of how to use the equipment and maintenance services. Besides, equipment requiring maintenance services will be procured by manufacturers which hold its maintenance service agent in Uzbekistan or neighboring countries. Considering these points, it can be judged that the implementation of this project under the grant-aid program by the Government of Japan is duly appropriate.

4-1-2 Benefit Effects

The following effects can be expected by the implementation of the project:

- (1) By procuring equipment for consultation departments such as ultrasound apparatus, electrocardiograph and endoscopic, examination and diagnosis of pregnant women can be done precisely and smoothly as well as appropriate treatment can be expected.
- (2) By procuring equipment for clinical medicine departments such as spectrophotometer and hematology analyzer, clinical examination

and diagnosis of pregnant women and neonates can be done precisely as well as appropriate treatment can be expected.

- (3) By procuring equipment for obstetrical departments such as delivery table, fetal monitor and suction unit, accurate monitoring of the mother's body and a fetus and safe delivery can be done, which can be expected to decrease death rates of mothers and neonates.
- (4) By procuring equipment for neonates and infants departments such as neonatal monitor and infant incubator, precise observation and treatment of neonates and infants can be expected.
- (5) By procuring equipment for CCU such as operating table, anesthesia apparatus and patient monitor, safe operation of patients including mothers and children can be done as well as appropriate patient monitoring and treatment including after-operation observation can be expected.
- (6) Designated facilities of the project are high-ranking referral hospitals, therefore, they will be able to offer precise diagnosis and treatment to patients transferred from lower referral hospitals besides the local residents by improving the above medical equipment. It can help them to retrieve reliability of the referral system from the population.

4-2 Recommendation

As mentioned above, this project is anticipated to bear tremendous effects and to contribute to the improvement of BHN for the local residents. Therefore, it can be judged implementation of this project has significant meaning. In addition, there may be no problem in obtaining personnel and funds in Uzbekistan for the implementation of the project. However, in order to implement this project more smoothly and effectively, the following points should be considered:

1) Purposes of this project are to procure medical equipment which are exposed to shortage at designated facilities, to promote medical activities, and to support indirectly the "Mothers and Children's Health Improvement Plan" currently promoted by the country. This project can be accomplished by satisfying not only "hardware" aspect (equipment), but also "software" aspect. Thus, we propose the following ideas:

① Local residents should be educated to make aware how practice of health care is important so that they consult a doctor and take medical treatment at an early stage. To enable these practices, establishment of a sufficient medical system which will not cost users much, is expected.

② Medical staff should be educated in order to understand what real medical services are, what patients expect them, and what the missions of medical service staff are. Moreover efforts are to be made to get across a sense of social morals to medical staff and stimulate motivation of the medical staff.

2) This project includes equipment which require management and maintenance costs. And, some equipment need maintenance services based on maintenance contracts with manufacturers. In order to use the equipment effectively for a long term, a budget for the maintenance services should be secured.

3) In order to clarify both effects and problems of the project, reports on performance results of the designated facilities, operational conditions of the equipment, and contract conditions of maintenance services should be submitted to the Japanese side every four months. Please refer to the Appendix "Report Form."

4) In order to amplify the effects of this project, a maintenance and management system should be established by assigning maintenance engineers to each designated facility and preparing a satisfactory maintenance system in addition to daily mechanical inspection.

Appendices

Member of the Study Team

- | | | |
|---------------------------------------|-------------------|---|
| 1. Team Leader | Yoshihiro IMAMURA | Grant Aid Division,
Economic Cooperation Bureau,
Ministry of Foreign Affairs |
| 2. Technical
Adviser | Syuuzou KANAGAWA | Bureau of International
Cooperation, International
Medical Center of Japan,
Ministry of Health and Welfare |
| 3. Project
Coordinator | Hiroshi NAKAMURA | First Project Study Division,
Grant Aid Project Study
Department, JICA |
| 4. Project
Manager | Shinichi KIMURA | BINKO LTD. |
| 5. Equipment
Planner I | Hiroyuki KIMURA | SYSTEM SCIENCE CONSULTANTS,
INC. |
| 6. Equipment
Planner II | Hiroshi MURAKAMI | BINKO LTD. |
| 7. Facility
Planner | Akihiro HAYAHARA | SYSTEM SCIENCE CONSULTANTS,
INC. |
| 8. Cost and
Procurement
Planner | Hiroaki NARITA | BINKO LTD. |
| 9. Interpreter | Yukichi GOTO | BINKO LTD. |

Basic Design Study
on
The Project for Improvement of Medical Equipment for Maternal and Child Hospitals
in Samarkand and Navoi

— List of Party Concerned in the Republic of Uzbekistan —

[Ministry of Health]

Dr. Yarkulov Ahror BAHRAMOVICH	Deputy Minister
Mr. J. Abdunamon SYDIKOV	Chief Department, External Economic Activities
Dr. DADAJANOV	Consultant, External Economic Activities
Dr. Abdumalik N. ARIPOV	Professor, Manager of Biochemical Department, Scientific Research Institute of Pediatrics

[Ministry for Foreign Economic Relations]

Mr. Hasan S. ISLAMKHODJAEV	Deputy Head Directorate General for Analysis and Prospects of Foreign Economic Relations Development
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[Tashkent]

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Dr. Alisher I. ISKANDAPOV	Professor Tashkent Medical Pediatric Institute, Hospital No. 2
Dr. Orchan S MACHMUDOV	Director, Scientific Research Institute of Pediatrics
Dr. Shuhrat B. TURSUNOV	Chief Physician of The Clinic of Pediatrics S-RI

[Andijan]

Dr. Batyrova MUKHARPAM	Deputy Director, City Health Department
Dr. Saidkhanova Saodat USMANOVNA	Director, No. 3 Maternity Hospital
Dr. Shireeva Zemira FRANTSEVNA	Director, No. 1 Children Hospital

{Samarkand Region}

Dr. Yerman K. KUSHMURADOB	Director, Samarkand Regional Health Department
Dr. Manatkhul K AZIZOV	Director, Samarkand Regional Children Hospital
Dr. Kholmurad M. MELIKULOV	Director, Samarkand Regional Health Center for Mother and Children

{Navoi Region}

Mr. Khayat R. GAFAROV	Governor of the Navoi Region
Ms. Lyudmila P. YUPIKOVA	Deputy Governor of the Navoi Region
Dr. Kuddus E. ABDULKADIROV	First Deputy Director, Navoi Regional Health Department
Dr. Majid Z. NAJIMOV	Deputy Director, Navoi Regional Health Department
Ms. Erik A. BATIRBAEV	General Director, Navoi Regional Hospital
Dr. Shavkat Buriye BURIOV	Director, Khatyrchi District Central Hospital

{Related Organization in Navoi Region}

MEDTECHNICA in Navoi Region

{International Organization and Other Donors}

Mr. Bakhodur M. ESHNOV	Programme Manager, UNDP
Mr. Omar NORMAN	Senior Programme Manager Regional Bureau for Europe and CIS (N.Y.) UNDP
Dr. Roufat YANSOUPOV	Regional Office for Europe WHO Liaison Office in Tashkent
Mr. Bahitier M. ABDULLAEV	Macroeconomy Unit, World Bank
Mr. David H. MANDEL	Country Representative, USAID

{Embassy of Japan in Uzbekistan}

Mr. Koich OBATA	Ambassador of Japan
Mr. Hideomi NAKAJIMA	Counsellor
Mr. Takashi WATANABE	Second Secretary
MR. Satoshi NAKANO	Second Secretary
Mr. Tomonori HASEGAWA	Third Secretary
Mr. Masao OKUDA	Attache

Schedule on Basic Design Study

Date	Official Member	Consultant / Chief	Equipment Planner (I)	Equipment Planner (II)	Facility Planner	Procurement / Cost Estimator	Interpreter
1 9/Sep	Narita → London (JL401) → Tashkent (HY236)	Narita → Moscow (JL445) → Tashkent (UN209)	--				(with Chief Consultant)
2 10/Sep	Av. Tashkent (08:05) Embassy of Japan Ministry of Health	Av. Tashkent (08:30)	--				- ditto -
3 11/Sep	Institute of Pediatrics Hospital No. 1 Hospital No. 2	--	--				"
4 12/Sep	Tashkent → Samarkand Regional Health Dept.	--	--				"
5 13/Sep	Documentation & Meeting	--	--				"
6 14/Sep	Documentation & Meeting	--	--				"
7 15/Sep	Health Care Center for Mother and Children Children Hospital	--	--				"
8 16/Sep	Samarkand → Navoi Regional Health Dept. Children Hospital	--	--				"
9 17/Sep	Khachyrysk Central Hospital Regional Hospital Navoi	--	--			Narita → Frankfurt (LH711) Marketing Research	"
10 18/Sep	Navoi → Tashkent Discussion with MOH	--	--			Marketing Research Frankfurt → Tashkent (HY244)	"
11 19/Sep	Signing on "Minutes of Meeting" (MOH) Report to EOJ	--	--	Narita → Moscow (IB6780) → Tashkent (UN209)	--	Marketing Research (Tashkent)	"
12 20/Sep	Tashkent → Frankfurt (LH2877) → Narita (JL408)	Documentation & Meeting	--	Av. Tashkent (05:30)	--	Documentation & Meeting	"
13 21/Sep	Av. Narita	Tashkent → Andijan	Tashkent → Samarkand	Tashkent → Navoi	Tashkent → Andijan	Tashkent → Navoi	"
14 22/Sep		Maternity Hospital (No. 3)	Health Care Center for Mother and Children (Samarkand)	Regional Hospital (Navoi)	Maternity Hospital (No. 3)	Regional Hospital (Navoi)	"
15 23/Sep		Children Hospital (No. 1) Diagnostic Center for Maternity (No. 3)	Health Care Center for Mother and Children (Samarkand)	Regional Hospital (Navoi)	Children Hospital (No. 1) Diagnostic Center for Maternity (No. 3)	Marketing Research (Navoi)	"
16 24/Sep		Andijan → Tashkent → Samarkand	Health Care Center for Mother and Children	Regional Hospital (Navoi)	Andijan → Tashkent → Samarkand	Marketing Research (Navoi)	"
17 25/Sep		Health Care Center for Mother and Children	Health Care Center for Mother and Children	Khachyrysk Central Hospital (Navoi)	Health Care Center for Mother and Children	Khachyrysk Central Hospital (Navoi)	"
18 26/Sep		Children Hospital (Samarkand)	Children Hospital (Samarkand)	Khachyrysk Central Hospital	Children Hospital (Samarkand)	Children Hospital (Navoi)	"

Schedule on Basic Design Study

Date	Day	Official Member	Consultant / Chief	Equipment Planner (I)	Equipment Planner (II)	Facility Planner	Procurement / Cost Estimator	Interpreter
19	27/Sep		Documentation and Meeting (Samarkand)	←	Navoi → Samarkand	Documentation and Meeting (Samarkand)	Navoi → Samarkand	(with Chief Consultant)
20	28/Sep		Samarkand → Navoi	Marketing Research (Samarkand)	Samarkand → Navoi	Samarkand → Navoi	Marketing Research (Samarkand)	- ditto -
21	29/Sep		Khachivrysk Central Hospital (Navoi)	Children Hospital (Samarkand)	Regional Hospital (Navoi)	Khachivrysk Central Hospital (Navoi)	Children Hospital (Samarkand)	"
22	30/Sep		Regional Hospital (Navoi)	Children Hospital (Samarkand)	Children Hospital (Navoi)	Regional Hospital (Navoi)	Health Care Center for Mother and Children	"
23	1/Oct		Children Hospital (Navoi)	Children Hospital (Samarkand)	Children Hospital (Navoi)	Children Hospital (Navoi)	Marketing Research (Samarkand)	"
24	2/Oct		Navoi → Tashkent	Samarkand → Tashkent	Navoi → Tashkent	←	Samarkand → Tashkent	"
25	3/Oct		MOH (Report & Discussion)	←	Marketing Research (Tashkent)	MOH (Report & Discussion)	Marketing Research (Tashkent)	"
26	4/Oct		Institute, Medical School, etc.	←	←	←	Marketing Research (Tashkent)	"
27	5/Oct		Documentation and Meeting	←	←	←	←	"
28	6/Oct		MOH	←	←	Infrastructure Research (Tashkent)	Marketing Research (Tashkent)	"
29	7/Oct		UN Organization Other Donor Country	←	←	Infrastructure Research (Tashkent)	Tashkent → Moscow (UN210)	"
30	8/Oct		UN Organization Other Donor Country	←	←	Infrastructure Research (Tashkent)	Marketing Research (Moscow)	"
31	9/Oct		MOH Embassy of Japan	←	←	Infrastructure Research (Tashkent)	Marketing Research (Moscow)	"
32	10/Oct		Report to MOH	←	←	Infrastructure Research (Tashkent)	Moscow → Narita (IB6781)	"
33	11/Oct		Marketing Research (Tashkent)	←	←	←	Av. Narita	"
34	12/Oct		Tashkent → Moscow (IB6652)	←	←	←	←	"
35	13/Oct		Moscow → Narita (IB6711)	←	←	←	←	"

Schedule on Draft Basic Design

	DATE		Official Member	Consultant / Chief	Equipment Planner (I)	Equipment Planner (II)	Interpreter
1	1/Dec.	Mon	Narita → Seoul → Tashkent (JL915) (HY212)	←	←	←	← (with Chief Consultant)
2	2/Dec.	Tue	Embassy of Japan Ministry of Health Tashkent → Samarkand	←	←	←	"
3	3/Dec.	Wed	Regional Health Dept.	←	←	←	"
4	4/Dec.	Thu	Samarkand Children Hospital	←	←	←	"
5	5/Dec.	Fri	Samarkand → Navoi Navoi Children Hospital Navoi Regional Hospital	←	←	←	"
6	6/Dec.	Sat	Khachtyrsk Central Hospital Navoi → Samarkand	←	←	←	"
7	7/Dec.	Sun	Samarkand → Tashkent	←	←	←	"
8	8/Dec.	Mon	Discussion with MOH	←	←	←	"
9	9/Dec.	Tue	Signing on Minutes	←	←	←	"
10	10/Dec.	Wed	Documentation & Meeting	Tashkent → Nukus	Documentation & Meeting	Documentation & Meeting	"
11	11/Dec.	Thu	Tashkent → Frankfurt (LH3277)	Children Hospital	Tashkent → Frankfurt (LH3277)	Tashkent → Frankfurt (LH3277)	"
12	12/Dec.	Fri	Av. Narita (NH210)	Discussion with MOH Nukus Children Hospital Nukus → Tashkent	Av. Narita (NH210)	Av. Narita (NH210)	"
13	13/Dec.	Sat	/	Tashkent → Frankfurt (LH3277)	/	/	"
14	14/Dec.	Sun		Av. Narita (NH210)			"

**MINUTES OF DISCUSSIONS
ON
THE BASIC DESIGN STUDY
ON
THE PROJECT FOR IMPROVEMENT OF MEDICAL EQUIPMENT
FOR MATERNAL AND CHILD HOSPITAL
IN SAMARKAND AND NAVOI
IN
THE REPUBLIC OF UZBEKISTAN**

In response to the request from the Government of Uzbekistan, the Government of Japan decided to conduct a Basic Design Study on the Project for Improvement of Medical Equipment for Maternal and Child Hospitals in Samarkand and Navoi (hereinafter referred to as "the Project"), and entrusted the Study to the Japan International Cooperation Agency(JICA).

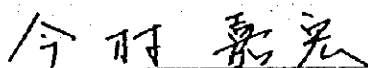
JICA sent to the Republic of Uzbekistan a study team (hereinafter referred to as "the Team"), which was headed by Mr.Yoshihiro IMAMURA,Grant Aid Division, Economic Cooperation Bureau, Ministry of Foreign Affairs, and is scheduled to stay in the country from September 10 to September 20, 1997.

The Team held discussions with officials of the Government of Uzbekistan and conducted site surveys of the hospitals.

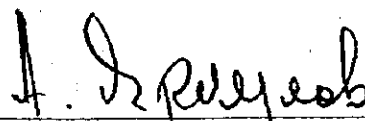
In the course of the discussions and site surveys, both parties confirmed the main issues described on the attached sheets.

The Team will proceed to further work and prepare for the Basic Design Study Report.

Tashikent, September 19, 1997



Mr.Yoshihiro IMAMURA
Leader,
Basic Design Study Team, JICA



Mr.Yarkulov Ahrom Bahramovich
Deputy Minister,
Ministry of Health

ATTACHMENT

1. Objective

The objective of the Grant Aid for the Project is to improve the fundamental medical service related to maternal and child health in Samarkand and Navoi Region through procurement of medical equipment to the hospitals.

2. Project Sites

(In Samarkand)

Samarkand Regional Children Hospital

Samarkand Regional Health Care Center for Mother and Children

(In Navoi)

Navoi Regional Children Hospital

Navoi Regional Hospital

Khatyrchi District Central Hospital

3. Responsible and Executing Organization.

(1) Responsible Agency - The Ministry of Health

(2) Executing Agency -

Samarkand Regional Children Hospital

Samarkand Regional Health Care Center for Mother and Children

Navoi Regional Children Hospital

Navoi Regional Hospital

Khatyrchi District Central Hospital

4. Items requested by the Government of Uzbekistan.

(1) After discussions with the Team, the following items were finally requested by the Government of Uzbekistan.(See Annex 1)

However, the final items of the Grant Aid will be decided after further studies by the Japanese side.

(2) The equipment will be selected by the basic criteria attached as Annex 2

5. Japan's Grant Aid System

1) The Government of Uzbekistan has understood Japan's Grant Aid System as described in Annex 3.

2) The Government of Uzbekistan will take necessary measures, as described in Annex 4 for smooth implementation of the Grant Aid, on condition that the Grant Aid by the Government of Japan is extended to the Project.

Sm

L. Spuyeb

6. Schedule of the Study

- 1) The consultants will carry out further studies in the Republic of Uzbekistan until October 11, 1997.
- 2) JICA will prepare for a draft Basic Design Report in English and dispatch a mission in order to explain its contents around November, 1997.
- 3) In case the contents of the draft report are accepted in principle by the Government of Uzbekistan, JICA will complete the final report and send it to the Government of Uzbekistan around February, 1998.

7. Other Relevant Issues

- (1) The Government of Uzbekistan has agreed to secure and allocate the enough budget to operate and maintain properly and effectively the equipment of the Project.
- (2) Both sides have agreed that the Uzbekistan side will evaluate the result of the Project by the monitoring indicators which will be made through the Basic Design Study, and will submit the report to the Japanese side on the request of the Japanese side.

Jw

I. Iyayev

REHABILITATION

Shortwave Diathermy Unit
Microwave Therapy Unit
Interferential Therapy Unit
Low Frequency Therapy Unit
Nebulizer

CLINICAL LABORATORY

Microscope
Spectrophotometer
Bilirubinmeter
Hematology Analyzer, 15 parameters
Blood Gas Analyzer
Coagulometer
Biochemical Analyzer

DIAGNOSTIC EXAMINATION ROOM

Diagnostic X-ray Unit, with TV System
Ultrasound Apparatus, General with Printer
Ultrasound Apparatus, Color Doppler with Printer
EEG
ECG, 12ch
Gastrointestinal Fiberscope, for Child
Bronchofiberscope, Child
Colonofiberscope, Child
Trolley, for Fiberscope
Light Source for Fiberscope
Suction Unit
Endoscopic Cabinet
Cleaner for Endoscope
Endoscopic Table
Dental X-ray Unit

A. Ibrayev

Sm

OPERATION ROOM

Operation Table

Anesthesia Apparatus

Lamp for Operation Room

Electrosurgical Unit

Ventilator

Suction Unit

Patient Monitor

Surgical Operation Instrument Set for Child

Surgical Dental Instrument Set for Child

Shunt

Endotracheal Set

Heart-Lung Machine

I.C.U. (REANIMATION)

Patient Monitor

Ventilator, for Infant

-

-

Fiber-Laryngoscope for Child

Infusion Pump

Syringe Pump

-

Hemosorbtion Unit, for Child

Jim

I. Iyevqub

NEW BORN BABY ROOM

Infant Incubator

Ventilator, for Infant

Neonatal Monitor

Humidifier

Infant Warmer

Phototherapy Unit

Laryngoscope, for Infant

Electronic Scale, 0-10 kg

Electronic Scale, 0-60 kg

Thermometer

Sphygmomanometer

Apparatus for Ultraviolet Radiation of Blood

Vacuum Matress for Infant

Massager

C.S.S.D.

High Pressure Steam Sterilizer with Steam Generator

Hot Air Sterilizer

Bottles Sterilizer

SUPPORTING

Patient Delivery Vehicle with Infant Incubator

DIAGNOSTIC EXAMINATION ROOM (CONSULTATION)

Ultrasound Apparatus, General

ECG, 6ch

Computer

OPERATION ROOM

Operation Table

Anesthesia Apparatus

Ventilator, with Oximeter & O2 Monitor

Patient Monitor

Defibrillator

Suction Unit

Electrosurgical Unit

Endotracheal Set

Operation Instrument Set, Caesarean Set

Operation Instrument Set, Hysterectomy Set

Laparoscope Set (1=normal, 1=laser)

Light Source for Laparoscope

LABOUR AND DELIVERY PREPARATION ROOM

Gatch Bed, High Grade Hi-Low

Fetal Monitor

Infusion Pump

Laryngoscope

Ultrasound Apparatus, Portable with Cart

Doppler Fetus Detector

OBSTETRICS ROOM

Obstetric Delivery & Operating Table

Suction Unit

In

I. Spuyat

N.I.C.U.

Laryngoscope, for Infant

Infant Incubator

Ventilator, for Infant

Infant Warmer

Phototherapy Unit

Syringe Pump

Neonatal Monitor

Pulse Oximeter

CLINICAL LABORATORY

Microscope

Spectrophotometer

Bilirubinmeter

Hemoglobinmeter

Blood Cell Counter, 15 & 5 parameters

Biochemical Analyzer, Table Top & Dry Chemical

SUPPORTING

Patient Delivery Vehicle

GENERAL

Electrical Scale, 0-10 kg

Thermometer

Sphygmomanometer

Stethoscope

Spirometer

Hand Washer

Autoclave

Water for Instrument

Am

I. Spuljic

NEW BORN BABY ROOM (NEONATOLOGY)

Gatch Bed, High Grade Hi-Low

Infusion Pump

Fetal Monitor

Laryngoscope

Ultrasound Apparatus, Mobile

Ultrasound Apparatus, General

Hemoglobinmeter

Infant Incubator

Syringe Pump

Ventilator, for Neonatal

Neonatal Monitor

Pulse Oximeter

Bilirubinmeter

Infant Warmer

Phototherapy Unit

Humidifier

OPERATION ROOM

Operation Table

Anesthesia Apparatus

Patient Monitor

Suction Unit

Electrosurgical Unit

Infusion Pump

Instrument Set (Big & Small)

Laparoscope Set (Operation)

Operation Material Set

Sterilizer for Instrument

Light for Operation Room

Air Conditioner for Operation Room

Sm

A. Spuykot

CLINICAL LABORATORY

Microscope

Centrifuge

Spectrophotometer

Refractometer

Biochemical Analyzer

pH Meter

Hemoglobinmeter

Bilirubinmeter

Electrolite Analyzer, K-Na-Cl

Blood Type Meter

Hematology Analyzer, 15 parameters

Thermostat

Water Sterilizer

I.C.U.

ICU Bed

Patient Monitor

Side Table

Suction Unit

I.V. Stand

Gastrointestinal Fiberscope, for Child

Bronchofiberscope, for Child

Ventilator

Defibrillator with Trolley

NEUROLOGICAL DEPARTMENT

EEG

Echo Scope

PEDIATRIC DEPARTMENT

ECG, 6ch

Sphygmomanometer

Sm

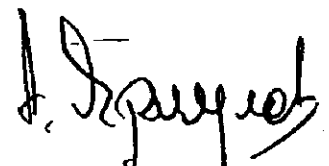
A. Spuyev

NEW BORN BABY ROOM

Infant Incubator
Ventilator, for Infant
Neonatal Monitor
Infant Warmer
Phototherapy Unit
Laryngoscope, for Child
Infusion Pump
Syringe Pump
Humidifier
Bilirubinmeter
Pulse Oximeter
O2 Monitor

OPERATION ROOM

Operation Table
Operation Light, Ceiling Type-2, Mobile-1
Patient Monitor
Anesthesia Apparatus
Defibrillator
Ventilator (for Anesthesia Apparatus)
Electrosurgical Unit
Surgical Operation Instrument Set (Big -2, Small -2)
O2 Monitor
Pulse Oximeter
High Pressure Steam Sterilizer with Steam Generator
Hor Air Sterilizer
Doppler Fetus Detector
Ultrasound Apparatus, Portable
Gynaecological Laparoscope
Air Conditioner for Operation Room



I.C.U.

Patient Monitor

Ventilator

Infusion Pump

Syringe Pump

O2 Monitor

Pulse Oximeter

Suction Unit

Gastrointestinal Fiberscope (Child -1, Adult -1)

DIAGNOSTIC EXAMINATION ROOM

Diagnostic X-ray Unit, with TV System

Ultrasound Apparatus, Color Doppler

ECG, 6ch

Spirometer, Portable

CLINICAL LABORATORY

Microscope

Centrifuge, Table Top

Spectrophotometer

Bilirubinmeter

Hemoglobinmeter

Electrolite Analyzer, K-Na-Cl

Refractometer

Refrigerator, Medical

O2 Analyzer

Biochemical Analyzer, Dry Chemical

Hematology Analyzer, 15 parameters

Electronic Scale

Citological Analyzer

Immunological Analyzer

Blood Type/Rezus Meter

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SUPPORTING

Infant Warmer

Laryngoscope, for Infant

Humidifier

Electrical ?

Surgical Instrument Set

pH Meter

Hematology Analyzer, 15 parameters

Sterilizer for Instrument

Phototherapy Unit

Nebulizer

ECG, 6ch

EEG

-

Urology Cystoscope, Surgical

Jm

A. Ispirov

DELIVERY PREPARATION DEPARTMENT

Delivery Table
Infusion Pump
Fetal Monitor
Ultrasound Apparatus, Mobile
Hemoglobinmeter
Ventilator
Neonatal Monitor
Pulse Oximeter
Bilirubinmeter
Infant Incubator
Operation Table
Anesthesia Apparatus
Suction Unit
Operation Instrument Set (Big)
Doppler Fetus Detector
Infant Warmer
Electrosurgical Unit

I.C.U.

Surgical Instrument Set
Laryngoscope, for Infant
Humidifier
Nebulizer
ECG, 6ch
EEG
-
Infusion Pump
Fetal Monitor
Ventilator
Pulse Oximeter
Bronchofiberscope
Anesthesia Apparatus
Suction Unit

CHILD DEPARTMENT

Infant Warmer
Phototherapy Unit
Nebulizer
Ultrasound Apparatus, Mobile
Ventilator
Neonatal Monitor
Bilirubinmeter
Gastrointestinal Fiberscope, for Child
Bronchofiberscope, for Child
Infant Incubator

SURGICAL DEPARTMENT

Urology Cystoscope
Electrosurgical Unit
Operation Table
Operation Instrument Set (Big)

OPERATION ROOM

Suction Unit
Sterilizer for Instrument

CLINICAL LABORATORY

pH Meter
Hematology Analyzer, 15 parameters
Hemoglobinmeter
Microscope

INFANT DEPARTMENT

Infant Warmer
Nebulizer

Sm

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Basic Criteria for Selection of Equipment

- 1) Equipment which will be included in the Grant Aid
 - (a) Equipment which is necessary for basic diagnostic activities
 - (b) Equipment to be replaced for the existing one
 - (c) Equipment which can be dealt with easier and established technologies
 - (d) Equipment of which cost performance is high
 - (e) Equipment of which Uzbekistan side can allocate necessary operating and running cost
 - (f) Equipment of which needs and appropriateness concerning diagnosis and treatment activities (the number of patients, the number of the specimen) are fully confirmed

- 2) Equipment which will be excluded from the Grant Aid
 - (a) Equipment which may be incompatible with related laws and regulations concerning drainage treatment, waste treatment and X-ray in the Uzbekistan and Japan
 - (b) Equipment of which maintenance is difficult technically or financially
 - (c) Equipment which is possible to be purchased locally by the hospital finance
 - (d) Equipment which uses materials causing environmental problem, such as Freon pollution, sewage, exposition to radioactive and waste disposal
 - (e) Equipment which is relevant to a radioactive isotope
 - (f) Equipment which is obtained after the request was submitted, or for which a budget allocation has taken by the Uzbekistan side

Japan's Grant Aid Program

1. Japan's Grant Aid Procedures

(1) The Japan's Grant Aid Program is executed by the following procedures.

Application (Request made by a recipient country)

Study (Preliminary Study / Basic Design Study conducted by JICA)

Appraisal & Approval (Appraisal by the Government of Japan and Approval by the Cabinet of Japan)

Determination of Implementation (Exchange of Notes between the both Governments)

Implementation (Implementation of the Project)

(2) Firstly, an application or a request for a project made by the recipient country is examined by the Government of Japan (the Ministry of Foreign Affairs) to see whether or not it is suitable for Japan's Grand Aid. If the request is deemed suitable, the Government of Japan entrusts a study on the request to JICA (Japan International Cooperation Agency).

Secondly, JICA conducts the Study (Basic Design Study), using a Japanese consulting firm. If the background and objective of the requested project are not clear, a Preliminary Study is conducted prior to a Basic Design Study.

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

Fourthly, the Project approved by the Cabinet becomes official when pledged by the Exchange of Notes signed by the both Governments.

Finally, for the implementation of the Project, JICA assists the recipient country in preparing contracts and so on.

2. Contents of the Study

(1) Contents of the Study

The purpose of the Study (Preliminary Study/Basic Design Study) conducted on a project requested by JICA is to provide a basic document necessary for appraisal of the project by the Japanese Government. The

contents of the Study are as follows:

- a) to confirm background, objectives, benefits of the project and also institutional capacity of agencies concerned of the recipient country necessary for project implementation,
- b) to evaluate appropriateness of the Project for the Grant Aid Scheme from a technical, social and economical point of view,
- c) to confirm items agreed on by the both parties concerning a basic concept of the project,
- d) to prepare a basic design of the project,
- e) to estimate cost involved in the project.

Final project components are subject to approval by the Government of Japan and therefore may differ from an original request.

Implementing the project, the Government of Japan requests the recipient country to take necessary measures involved which are itemized on Exchange of Notes.

(2) Selecting (a) Consulting Firm(s)

For smooth implementation of the study, JICA uses (a) consulting firm(s) registered. JICA selects (a) firm(s) through proposals submitted by firms which are interested. The firm(s) selected carry(ies) out a Basic Design Study and write(s) a report, based upon terms of reference made by JICA. The consulting firm(s) used for the study is (are) recommended by JICA to a recipient country after Exchange of Notes, in order to maintain technical consistency and also to avoid possible undue delay in implementation caused if a new selection process is repeated.

(3) Status of a Preliminary Study in the Grant Aid Program

A Preliminary Study is conducted during the second step of a project formulation & preparation as mentioned above.

A result of the study will be utilized in Japan to decide if the Project is to be suitable for a Basic Design Study

Based on the result of the Basic Design Study, the Government would proceed to the stage of decision making process (appraisal and approval) .

It is important to notice that at the stage of Preliminary Study, no commitment is made by the Japanese side concerning the realization of the Project in the scheme of Grant Aid Program.

3. Japan's Grant Aid Scheme

(1) What is Grant Aid?

The Grant Aid Program provides a recipient country with non reimbursable funds needed to procure facilities, equipment and services for

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economic and social development of the country under the following principles in accordance with relevant laws and regulations of Japan. The Grant Aid is not in a form of donation or such.

(2) Exchange of Notes (E/N)

The Japan's Grant Aid is extended in accordance with the Exchange of Notes by both Governments, in which the objectives of the Project, period of execution, conditions and amount of the Grant etc. are confirmed.

(3) "The period of the Grant Aid" means one Japanese fiscal year which the Cabinet approves the Project for. Within the fiscal year, all procedure such as Exchange of Notes, concluding a contract with (a) consulting firm(s) and (a) contractor(s) and a final payment to them must be completed.

(4) Under the Grant, in principle, products and services of origins of Japan or the recipient country are to be purchased.

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

However the prime contractors, namely, consulting, contractor and procurement firms, are limited to "Japanese nationals". (The term "Japanese nationals" means Japanese physical persons or Japanese juridical persons controlled by Japanese physical persons.)

(5) Necessity of the "Verification"

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

(6) Undertakings required to the Government of the recipient country

In the implementation of the Grant Aid, the recipient country is required to undertake necessary measures such as the following:

- a) to secure land necessary for the sites of the project and to clear and level the land prior to commencement of the construction work,
- b) to provide facilities for distribution of electricity, water supply and drainage and other incidental facilities in and around the sites,
- c) to secure buildings prior to the installation work in case the Project is providing equipment,

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- d) to ensure all the expenses and prompt execution for unloading, customs clearance at the port of disembarkation and internal transportation of the products purchased under the Grant Aid,
- e) to exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which will be imposed in the recipient country with respect to the supply of the products and services under the Verified Contracts,
- f) to accord Japanese nationals whose services may be required in connection with the supply of the products and services under the Verified Contracts, such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work.

(7) Proper Use

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

(8) Re-export

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

(9) Banking Arrangement (B/A)

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

Necessary Measures to be Taken by the Republic of Uzbekistan

To

1. provide data and information necessary for the Grant Aid,
2. secure the site for the Grant Aid,
3. clear, level and reclaim the site prior to commencement of the Grant Aid,
4. undertake incidental outdoor works such as gardening, fencing, gates and exterior lightning in and around the site,
5. provide facilities for distribution of electricity, water supply, telephone, drainage, sewerage and other incidental facilities to the site,
 - (1) electricity distributing line to the site
 - (2) city water distribution main to the site
 - (3) main city drainage to the site
 - (4) telephone trunk line and the main distribution panel of building
 - (5) general furniture such as carpets, curtains, tables, chairs and others
6. bear commissions to the Japanese foreign exchange bank for its banking service based upon the Banking Arrangement (B/A), namely the advertising commission of the Authorization to Pay (A/P) and payment commission,
7. ensure prompt unloading, tax exemption, customs clearance at the port of disembarkation in Republic of Uzbekistan and prompt internal transportation therein of the materials and equipment for the Project purchased under the Grant Aid,
8. exempt Japanese juridical and physical nationals engaged in the Grant Aid from customs duties, internal taxes and other fiscal levies which may be imposed in Uzbekistan with respect to the supply of the products and services under the verified contracts,
9. accord Japanese nationals whose services may be required in connection with the supply of the products and services under the verified contracts such facilities as may be necessary for their entry into Uzbekistan and stay therein for the performance of their work,
10. provide necessary permissions, licenses and other authorizations for implementing the Grant Aid, if necessary,
11. assign appropriate budget and teaching and administrative staff members for proper and effective operation and maintenance of equipment procured under the Grant Aid,
12. maintain and use properly and effectively the facilities constructed and the equipment procured under the Grant Aid, and
13. bear all the expenses, other than those to be borne by the Japan's Grant Aid within the scope of the Project

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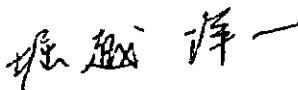
**MINUTES OF DISCUSSIONS
ON
THE BASIC DESIGN STUDY
ON
THE PROJECT FOR IMPROVEMENT OF MEDICAL EQUIPMENT
FOR MATERNAL AND CHILD HOSPITALS
IN SAMARKAND AND NAVOI
IN
THE REPUBLIC OF UZBEKISTAN
(CONSULTATION ON DRAFT REPORT)**

In September 1997, the Japan International Cooperation Agency (JICA) dispatched a Basic Design Study Team on the Project for Improvement of Medical Equipment for Maternal and Child Hospitals in Samarkand and Navoi (hereinafter referred to as "the Project"), and through discussions, site surveys, and technical examination of the results in Japan, has prepared the draft report of the study.


In order to explain and to consult the Uzbekistan side on the components of the draft report, JICA sent to Uzbekistan a Study Team, which is headed by Dr. Yoichi HORIKOSHI, Bureau of International Cooperation, International Medical Center of Japan, Ministry of Health and Welfare and stayed in the country from December 1 to December 11, 1997.

As a result of discussions, both parties have confirmed the main items described on the attached sheets.

Tashkent, December 9, 1997



Dr. Yoichi HORIKOSHI, M.D.
Leader,
Basic Design Study Team, JICA



Dr. Yarkulov Ahror Bahramovich, M.D.
Deputy Minister,
Ministry of Health

ATTACHMENT

1. Components of the draft report

The Government of Uzbekistan has in principle agreed and accepted the components of the draft report proposed by the Team.

2. Items requested by the Government of Uzbekistan.

After discussions with the Team, the following items were finally requested by the Government of Uzbekistan.(See Annex 1)

However, the final items of the Grant Aid will be decided after further studies by the Japanese side.

3. Japan's Grant Aid System

(1) The Government of Uzbekistan has understood the Japan's Grant Aid System as described in Annex 2.

(2) The Government of Uzbekistan will take necessary measures, as described in Annex 3 for smooth implementation of the Grant Aid, on condition that the Grant Aid by the Government of Japan is extended to the Project.

4. Presentation of the final report

JICA will make the final report in accordance with the confirmed items and send it to the Government of Uzbekistan around February, 1998.

5. Other Relevant Issues

(1) The Government of Uzbekistan has agreed to secure and allocate the enough budget to operate and maintain properly and effectively the equipment of the Project.

(2) Both sides have agreed that the Ministry of Health of the Uzbekistan has the responsibility to evaluate the outcome of the Project by monitoring the activities of the hospitals, and will submit the report to the Japanese side annually. The format and the monitoring indicators of the report will be presented in the final report.

(3) The Government of Uzbekistan has agreed to complete the necessary repair works of the X-ray rooms before the X-ray equipment is installed. The details of the repair works will be indicated by the consultant of the Basic Design Study Team at the Detailed Design Study.

A. Ispayev

G. H

Item No.	Description	SCH	SMCH	NGH	NCH	NKDH	Total
Clinical Laboratory Department							
CL-001	Microscope	3	3	3	3	3	15
CL-002	Spectrophotometer	1	1	1	1	1	5
CL-003	Biochemical Analyzer	1	1	1	1	-	4
CL-004	Autoclave	1	1	1	1	-	4
CL-005	Laboratory Incubator, with Stand	1	-	1	-	-	2
CL-006	Glassware Washer	1	1	1	1	1	5
CL-007	Wintrobe Hematocrit Set	1	1	1	1	1	5
CL-008	Centrifuge, Table Top Type, General Purpose	1	1	1	1	1	5
CL-009	Clinical Refractometer	-	-	-	-	1	1
CL-010	Refrigerator	1	1	1	1	1	5
CL-011	Electronic Balance	1	1	1	1	-	4
CL-012	Blood Type Test Set	-	-	1	1	-	2
CL-013	Water Distilling Apparatus (1.8 lit./h.)	1	-	1	-	-	2
Sterilization Department							
ST-001	High Pressure Steam Sterilizer with Generator	2	1	-	-	1	4
ST-002	Hot Air Sterilizer	1	-	-	1	-	2
ST-003	Instrument Sterilizer, M size, Pedal Type	-	2	-	-	-	2
Obstetric / Delivery Department							
DL-001	Gatch Bed	-	3	2	-	-	5
DL-002	Fetal Monitor	-	1	1	-	1	3
DL-003	Infusion Pump	-	3	2	-	2	7
DL-004	Laryngoscope (with Ambu Bag)	-	2	1	-	1	4
DL-005	Ultrasound Diagnostic Unit, Portable Type	-	1	1	-	1	3
DL-006	Doppler Fetus Detector	-	1	1	-	1	3
DL-007	Hydrotubation Apparatus	-	1	-	-	-	1
DL-008	Infant Warmer	-	1	1	-	1	3
DL-009	Delivery Table	-	4	5	-	4	13

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Item No.	Description	SCH	SMCH	NGH	NCH	NKDH	Total
DL-010	Suction Unit, 2 Bottles Type	.	4	4	.	2	10
DL-011	Gynecological Examination Unit	.	4	5	.	4	13
DL-012	Kelly's Pad	.	8	8	.	8	24
DL-013	Baby Scale, 0-10 kg	.	2	2	.	2	6
Dental Department							
DT-001	Dental X-ray Unit	1	.	.	.	.	1
Diagnostic Examination Department							
EX-001	Ultrasound Diagnostic Unit, with Doppler Unit and Printer	1	1	1	1	1	5
EX-002	EEG	1	.	1	1	.	3
EX-003	ECG, 6ch	1	1	1	1	1	5
EX-004	ECG, Portable 1ch	1	.	.	.	.	1
EX-005	Gastrofiberscope, for Child	1	.	1	1	1	4
EX-006	Bronchofiberscope, for Child	1	.	1	1	1	4
EX-007	Colonofiberscope, for Child	1	.	.	.	.	1
EX-008	Light Source for Fiberscope	2	.	1	1	1	5
EX-009	Trolley, for Fiberscope	2	.	1	1	1	5
EX-010	Endoscopic Table	2	.	1	1	1	5
EX-011	Endoscopic Cabinet	2	.	1	1	1	5
EX-012	Cleaner for Endoscope	2	.	1	1	1	5
EX-013	TV Monitor Set for Fiberscope	1	.	.	.	.	1
EX-014	Weighing Scale, 150kg	1	1	1	1	1	5
EX-015	Thermometer	33	13	10	10	10	76
EX-016	Sphygmomanometer	15	5	10	5	5	40
EX-017	Diagnostic Set	4	4	4	4	4	20
EX-018	Examination Light	1	2	2	1	1	7
EX-019	Instrument Sterilizer, Table Top	3	3	3	3	3	15
EX-020	High Pressure Steam Sterilizer, Table Top	3	3	3	3	3	15
EX-021	Baby Scale, 0-10 kg	1	.	.	1	1	3

A. S. P. Y. S. S.

G. K.

List of Equipment

ANNEX 1

Item No.	Description	SCH	SMCH	NGH	NCH	NKDH	Total
Reanimation Department (Infant)							
RAI-001	Patient Monitor	3	.	.	2	.	5
RAI-002	Laryngoscope (with Ambu Bag) for Child	1	.	.	1	.	2
RAI-003	Infusion Pump	2	.	.	2	.	4
RAI-004	Syringe Pump	3	.	.	5	.	8
RAI-005	Pulse Oximeter	1	.	.	1	1	3
RAI-006	Suction Unit, Portable Type	1	.	.	1	1	3
Reanimation Department (Mother)							
RAM-001	ICU Bed	.	.	4	.	.	4
RAM-002	Patient Monitor	.	.	2	.	.	2
RAM-003	Suction Unit, Portable Type	.	.	2	.	.	2
RAM-004	Ventilator (for Adult)	.	.	2	.	.	2
RAM-005	Defibrillator with Trolley	.	.	1	.	.	1
RAM-006	Infusion Pump	.	.	1	.	.	1
Laundry Department							
LD-001	Washing Machine, 30kg	2	1	.	.	2	5
LD-002	Extractor	2	1	.	.	2	5
Neonatology Department							
NB-001	Bilirubinmeter (with Hematocrit Centrifuge)	1	1	1	1	1	5
NB-002	Ultrasound Diagnostic Unit, Portable Type	1	.	.	1	.	2
NB-003	Infant Incubator	3	2	2	2	3	12
NB-004	Ventilator for Infant	1	1	1	1	1	5
NB-005	Neonatal Monitor	1	1	1	1	1	5
NB-006	Humidifier	2	2	2	2	2	10
NB-007	Infant Warmer	2	2	2	2	2	10
NB-008	Phototherapy Unit	3	2	2	2	2	11
NB-009	Laryngoscope (with Ambu Bag) for Infant	1	2	1	2	1	7
NB-010	Baby Scale, 0-10 kg	2	.	.	2	.	4

I. S. Prakash

G. B.

Item No.	Description	SCH	SMCH	NGH	NCH	NKDH	Total
NB-011	Milk Warmer	1	1	1	1	1	5
NB-012	Breast Pump (Milking Machine)	1	1	1	1	1	5
NB-013	Pules Oximeter	1	2	1	1	2	7
NB-014	Suction Unit, Portable Type	1	1	1	1	1	5
NB-015	Syringe Pump	2	2	2	2	2	10
NB-016	Nubulizer	.	.	.	2	2	4
NB-017	Infant Incubator, Portable, for Transportation	1	1	1	1	1	5
Operation Department							
OP-001	Operation Table	2	2	2	2	2	10
OP-002	Anesthesia Apparatus, with Ventilator	2	2	2	1	2	9
OP-003	Operation Light, Ceiling Type (2)	2	.	2	1	.	5
OP-004	Electrosurgical Unit	2	2	2	2	2	10
OP-005	Suction Unit, 2 Bottles Type	2	2	2	2	2	10
OP-006	Patient Monitor	2	2	2	2	2	10
OP-007	Surgical Instrument Set for Child	4	.	.	4	.	8
OP-008	Surgical Instrument Set	.	3	3	.	4	10
OP-009	Surgical Instrument Set, Caesarean Set	.	4	4	.	4	12
OP-010	Surgical Instrument Set, Hysterectomy Set	.	2	2	.	2	6
OP-011	Surgical Dental Instrument Set for Child	2	.	.	.	.	2
OP-012	Endotrachel Set	2	2	2	2	2	10
OP-013	Resuscitator	1	2	.	.	.	3
OP-014	Cytoscope	1	.	.	1	1	3
OP-015	Mayo Stand	2	2	2	2	2	10
OP-016	Defibrillator	.	1	.	1	.	2
OP-017	Laparoscope Set	.	1	1	.	.	2
OP-018	Light Source for Laparoscope	.	1	1	.	.	2
OP-019	Operating Light, Stand Type with Battery	.	1	.	1	1	3
OP-020	High Pressure Steam Sterilizer	.	.	2	2	2	6

J. S. S. S.

G. Z.

List of Equipment

ANNEX 1

Item No.	Description	SCII	SMCH	NGH	NCH	NKDH	Total
OP-021	Autoclavo, ϕ 40 x 65cm	-	-	1	-	-	1
OP-022	Laryngoscope (with Ambu Bag) for Infant	1	-	-	1	1	3
OP-023	Hor Air Sterilizer	-	-	-	1	-	1
Pharmacy Department							
PM-001	Bottle Sterilizer	1	-	-	-	-	1
Rehabilitation Department							
RH-001	Shortwave Diathermy	1	-	-	-	-	1
RH-002	Microwave Therapy Unit	1	-	-	-	-	1
RH-003	Interferential Therapy Unit	1	-	-	-	-	1
RH-004	Low Frequency Therapy	1	-	-	-	-	1
RH-005	Nebulizer	2	-	-	-	-	2
RH-006	Instrument Dryer with Ultra-Violet Lamp	1	-	-	-	-	1
X-ray Department							
X-001	Diagnostic X-ray Unit, with TV System	1	1	1	-	1	4
X-002	Film Dryer	1	1	1	-	1	4
X-003	Dark Room Lamp	1	1	1	-	1	4
X-004	Film Developing Set	1	1	1	-	1	4
X-005	Film Hunger	1	1	1	-	1	4
X-006	Film Preserve Box	1	1	1	-	1	4
X-007	Film Marker	1	1	1	-	1	4
X-008	X-ray Protective Apron	1	1	1	-	1	4
X-009	X-ray Protective Grovo	1	1	1	-	1	4
X-010	Film Cassette Set	1	1	1	-	1	4
X-011	Film Cassette Cabinet	1	1	1	-	1	4
X-012	X-ray Warning Indication Lamp	1	1	1	-	1	4

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Japan's Grant Aid Program

1. Japan's Grant Aid Procedures

- (1) The Japan's Grant Aid Program is executed by the following procedures.
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 - Appraisal & Approval** (Appraisal by the Government of Japan and Approval by the Cabinet of Japan)
 - Determination of Implementation** (Exchange of Notes between the both Governments)
 - Implementation** (Implementation of the Project)
- (2) Firstly, an application or a request for a project made by the recipient country is examined by the Government of Japan (the Ministry of Foreign Affairs) to see whether or not it is suitable for Japan's Grant Aid. If the request is deemed suitable, the Government of Japan entrusts a study on the request to JICA (Japan International Cooperation Agency).

Secondly, JICA conducts the Study (Basic Design Study), using a Japanese consulting firm. If the background and objective of the requested project are not clear, a Preliminary Study is conducted prior to a Basic Design Study.

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

Fourthly, the Project approved by the Cabinet becomes official when pledged by the Exchange of Notes signed by the both Governments.

Finally, for the implementation of the Project, JICA assists the recipient country in preparing contracts and so on.

I. S. [Signature]

G. H. [Signature]

2. Contents of the Study

(1) Contents of the Study

The purpose of the Study (Preliminary Study/Basic Design Study) conducted on a project requested by JICA is to provide a basic document necessary for appraisal of the project by the Japanese Government. The contents of the Study are as follows:

- a) to confirm background, objectives, benefits of the project and also institutional capacity of agencies concerned of the recipient country necessary for project implementation,
- b) to evaluate appropriateness of the Project for the Grant Aid Scheme from a technical, social and economical point of view,
- c) to confirm items agreed on by the both parties concerning a basic concept of the project,
- d) to prepare a basic design of the project,
- e) to estimate cost involved in the project.

Final project components are subject to approval by the Government of Japan and therefore may differ from an original request.

Implementing the project, the Government of Japan requests the recipient country to take necessary measures involved which are itemized on Exchange of Notes.

(2) Selecting (a) Consulting Firm(s)

For smooth implementation of the study, JICA uses (a) consulting firm(s) registered. JICA selects (a) firm(s) through proposals submitted by firms which are interested. The firm(s) selected carry(ies) out a Basic Design Study and write(s) a report, based upon terms of reference made by JICA.

The consulting firm(s) used for the study is (are) recommended by JICA to a recipient country after Exchange of Notes, in order to maintain technical consistency and also to avoid possible undue delay in implementation caused if a new selection process is repeated.

(3) Status of a Preliminary Study in the Grant Aid Program

A Preliminary Study is conducted during the second step of a project formulation & preparation as mentioned above.

A result of the study will be utilized in Japan to decide if the Project is to be suitable for a Basic Design Study

Based on the result of the Basic Design Study, the Government would proceed to the stage of decision making process (appraisal and approval).

It is important to notice that at the stage of Preliminary Study, no commitment is made by the Japanese side concerning the realization of the Project in the scheme of Grant Aid Program.

A. Ispajich

G. H.

3. Japan's Grant Aid Scheme

(1) What is Grant Aid?

The Grant Aid Program provides a recipient country with non reimbursable funds needed to procure facilities, equipment and services for economic and social development of the country under the following principles in accordance with relevant laws and regulations of Japan. The Grant Aid is not in a form of donation or such.

(2) Exchange of Notes (E/N)

The Japan's Grant Aid is extended in accordance with the Exchange of Notes by both Governments, in which the objectives of the Project, period of execution, conditions and amount of the Grant etc. are confirmed.

(3) "The period of the Grant Aid" means one Japanese fiscal year which the Cabinet approves the Project for. Within the fiscal year, all procedure such as Exchange of Notes, concluding a contract with (a) consulting firm(s) and (a) contractor(s) and a final payment to them must be completed.

(4) Under the Grant, in principle, products and services of origins of Japan or the recipient country are to be purchased.

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

However the prime contractors, namely, consulting, contractor and procurement firms, are limited to "Japanese nationals". (The term "Japanese nationals" means Japanese physical persons or Japanese juridical persons controlled by Japanese physical persons.)

(5) Necessity of the "Verification"

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

(6) Undertakings required to the Government of the recipient country

In the implementation of the Grant Aid, the recipient country is required to undertake necessary measures such as the following:

- a) to secure land necessary for the sites of the project and to clear and level the land prior to commencement of the construction work,

A. Inuyama

G. H.

- b) to provide facilities for distribution of electricity, water supply and drainage and other incidental facilities in and around the sites,
- c) to secure buildings prior to the installation work in case the Project is providing equipment,
- d) to ensure all the expenses and prompt execution for unloading, customs clearance at the port of disembarkation and internal transportation of the products purchased under the Grant Aid,
- e) to exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which will be imposed in the recipient country with respect to the supply of the products and services under the Verified Contracts,
- f) to accord Japanese nationals whose services may be required in connection with the supply of the products and services under the Verified Contracts, such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work.

(7) Proper Use

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

(8) Re-export

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

(9) Banking Arrangement (B/A)

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

A. S. S. S.

G. H.

Necessary Measures to be Taken by the Republic of Uzbekistan

To

1. provide data and information necessary for the Grant Aid,
2. secure the site for the Grant Aid,
3. clear, level and reclaim the site prior to commencement of the Grant Aid,
4. undertake incidental outdoor works such as gardening, fencing, gates and exterior lightning in and around the site,
5. provide facilities for distribution of electricity, water supply, telephone, drainage, sewerage and other incidental facilities to the site,
 - (1) electricity distributing line to the site
 - (2) city water distribution main to the site
 - (3) main city drainage to the site
 - (4) telephone trunk line and the main distribution panel of building
 - (5) general furniture such as carpets, curtains, tables, chairs and others
6. bear commissions to the Japanese foreign exchange bank for its banking service based upon the Banking Arrangement (B/A), namely the advertising commission of the Authorization to Pay (A/P) and payment commission,
7. ensure prompt unloading, tax exemption, customs clearance at the port of disembarkation in Republic of Uzbekistan and prompt internal transportation therein of the materials and equipment for the Project purchased under the Grant Aid,
8. exempt Japanese juridical and physical nationals engaged in the Grant Aid from customs duties, internal taxes and other fiscal levies which may be imposed in Uzbekistan with respect to the supply of the products and services under the verified contracts,
9. accord Japanese nationals whose services may be required in connection with the supply of the products and services under the verified contracts such facilities as may be necessary for their entry into Uzbekistan and stay therein for the performance of their work,
10. provide necessary permissions, licenses and other authorizations for implementing the Grant Aid, if necessary,
11. assign appropriate budget and teaching and administrative staff members for proper and effective operation and maintenance of equipment procured under the Grant Aid,
12. maintain and use properly and effectively the facilities constructed and the equipment procured under the Grant Aid, and
13. bear all the expenses, other than those to be borne by the Japan's Grant Aid within the scope of the Project

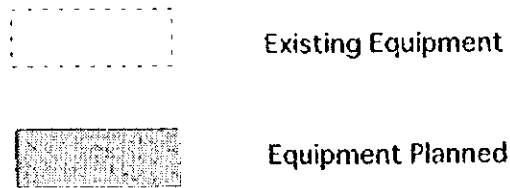
A. Ispirov

G.H.

Layout Plan for Planned Equipment

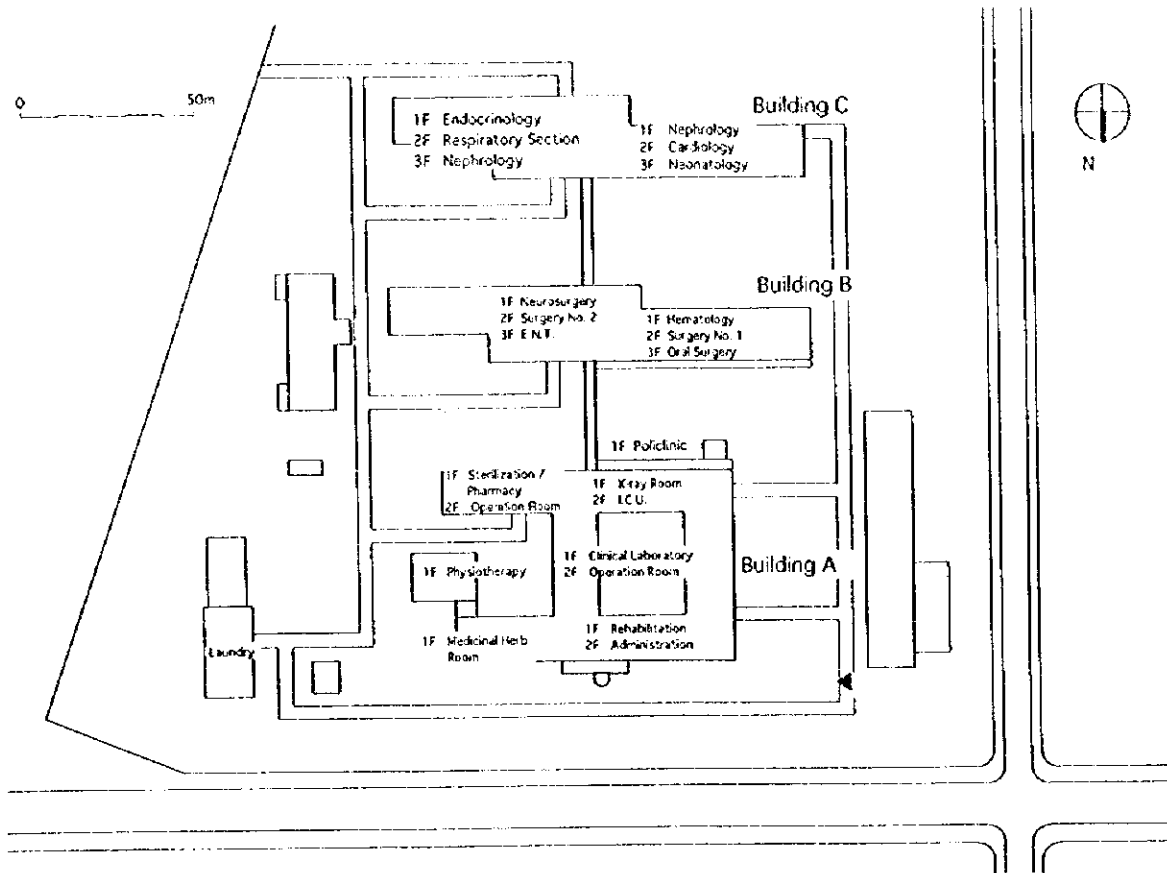
The layout drawings for the planned equipment which require the installation work are mentioned as follows.

The introductory remarks on the drawings mean as follows.

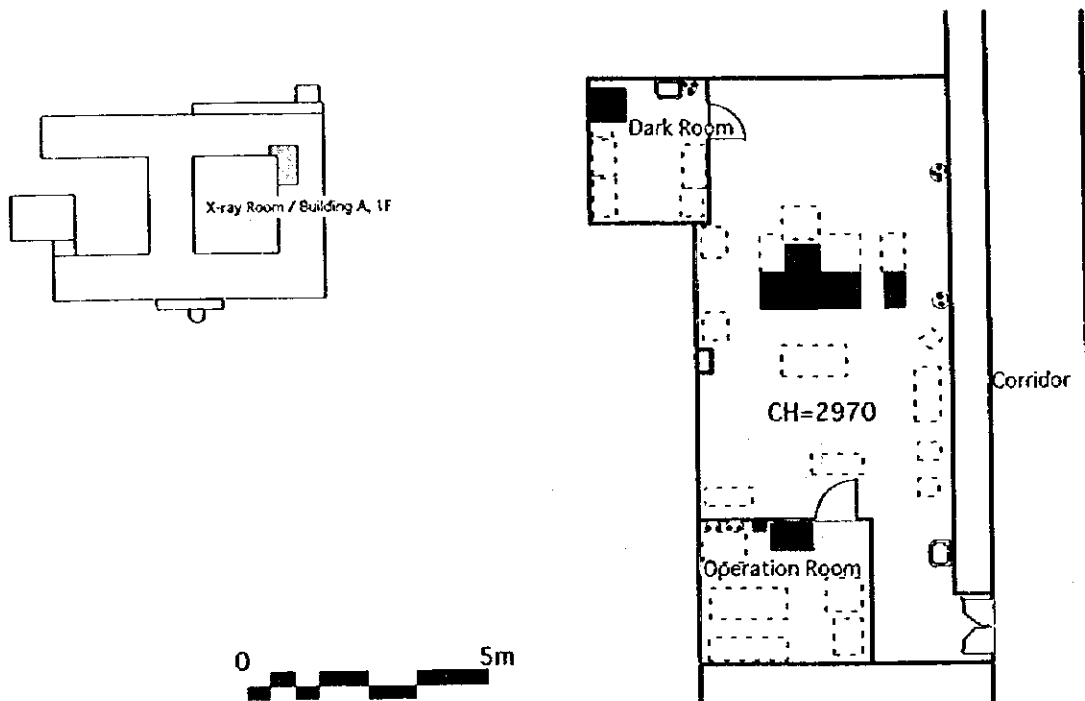


Introductory Remarks	
⊙	Electric outlet 220V
⊕	Electric outlet 220V, with grounding 5A
⊕	Electric outlet 220V, with grounding 25A
⊙	Electric outlet 380V, 3 phase
■	Electric supply, 3 phase
▬	Distribution Panel, for lights
▬	Distribution Panel, for motor
⊗	Drainage
⊗	Drainage, large

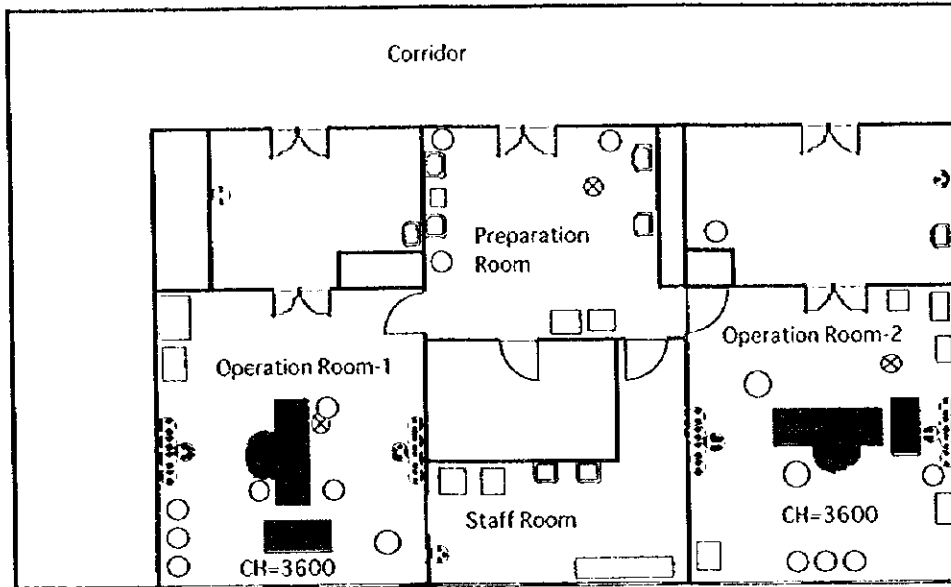
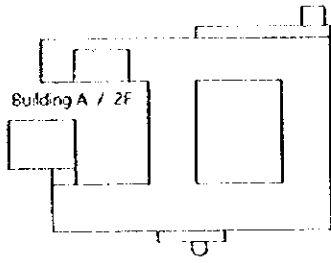
(1) Samarkand Regional Children Hospital



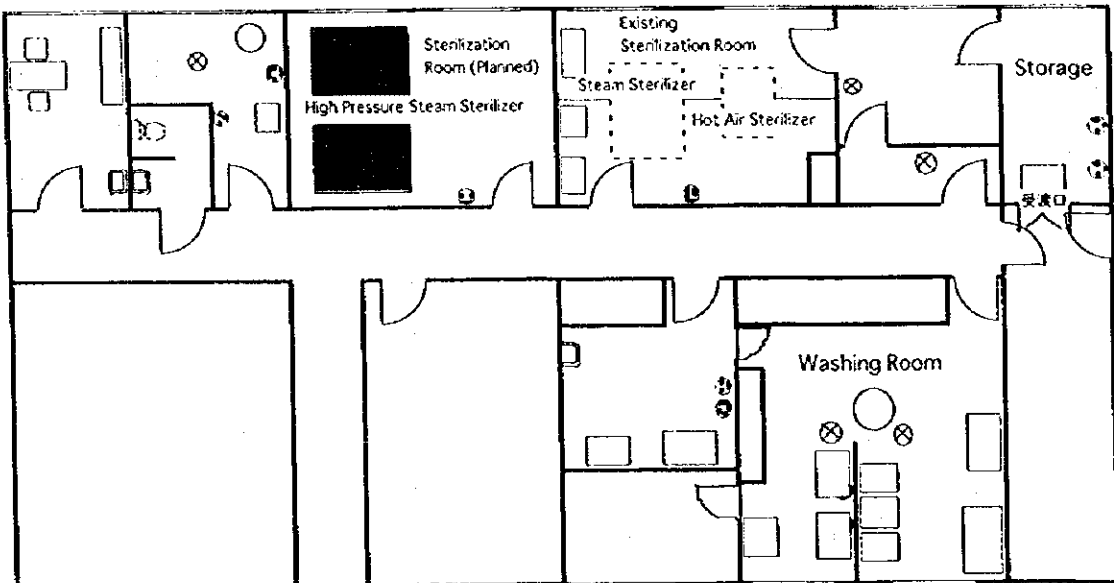
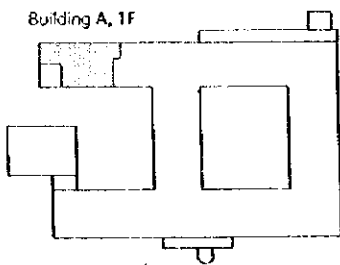
Location



X-ray Room

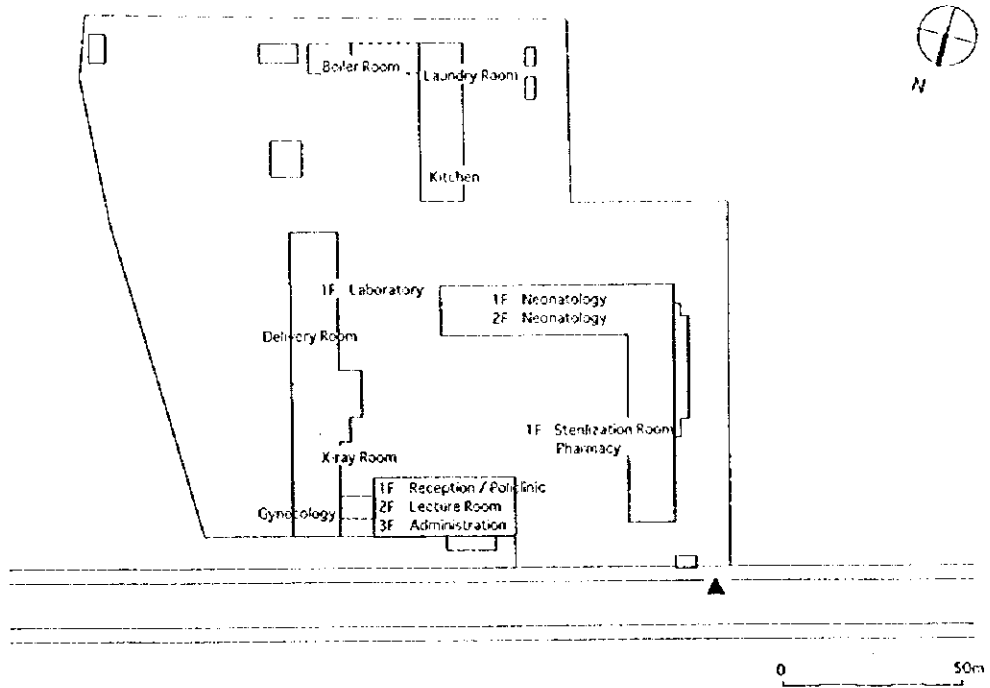


Operation Room

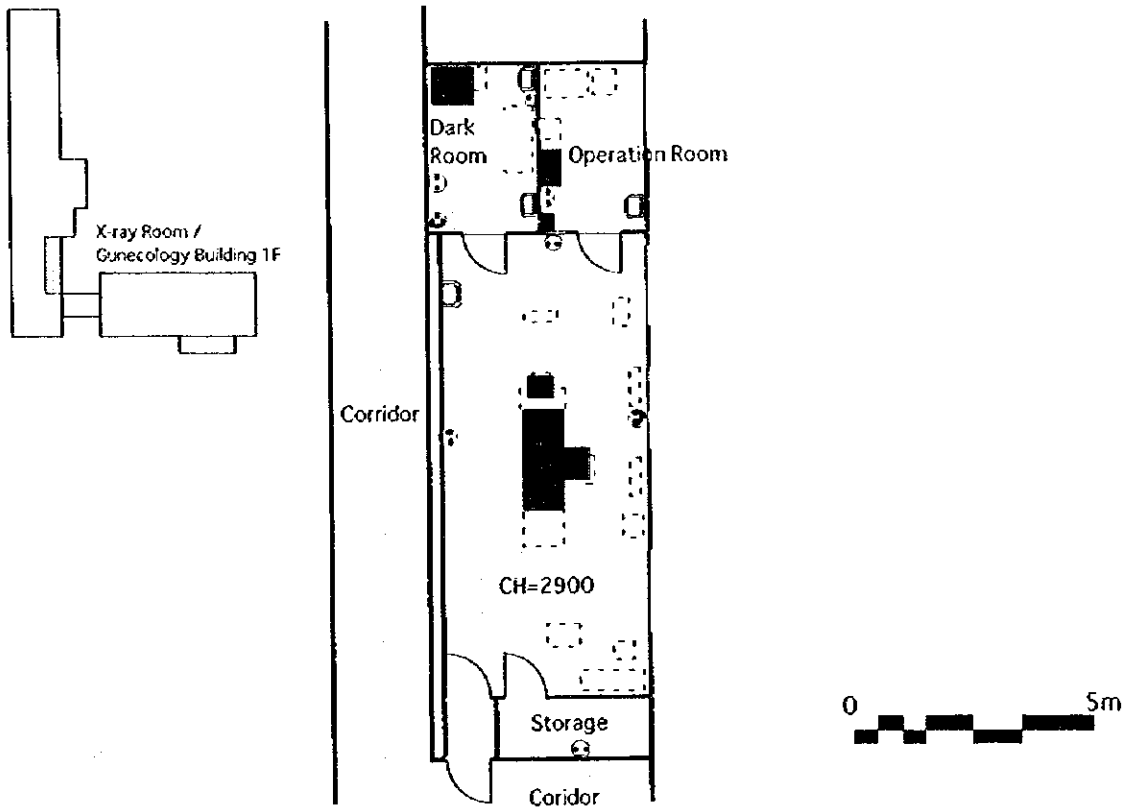


Sterilization Room

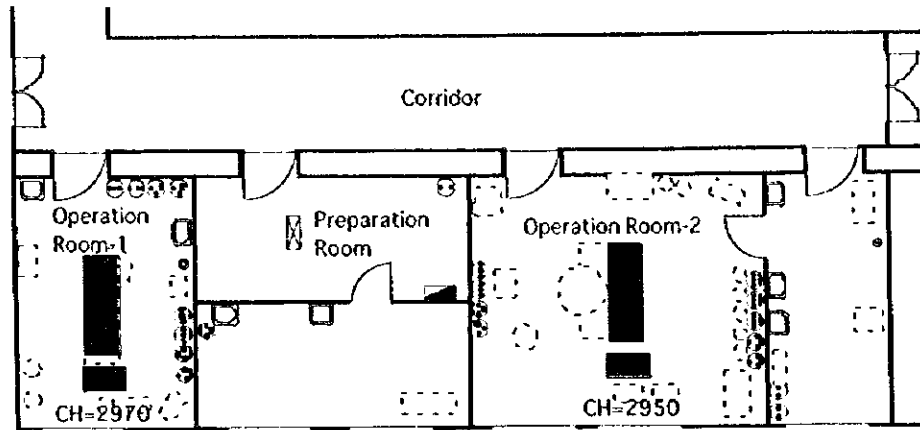
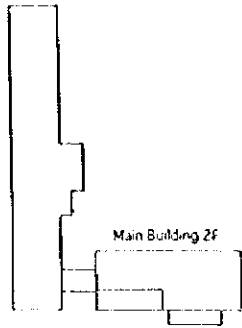
(2) Samarkand Regional Health Care Center for Mothers and Children



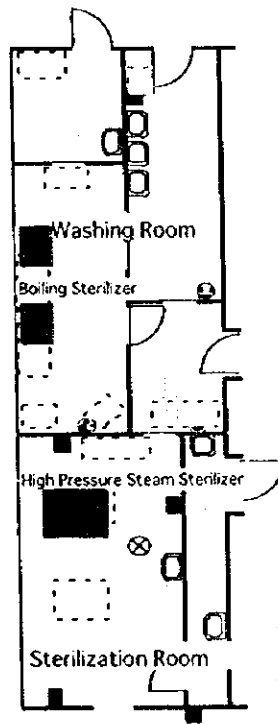
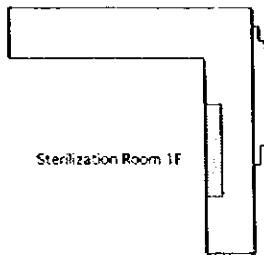
Location



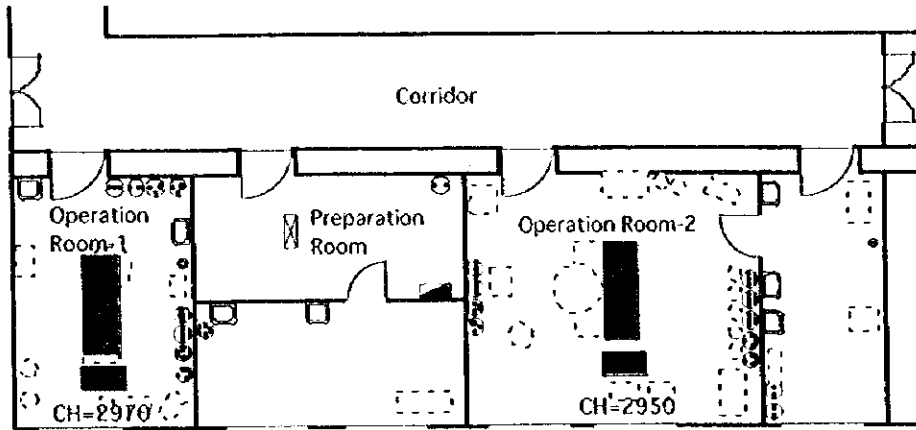
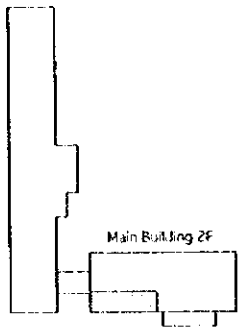
X-ray Room



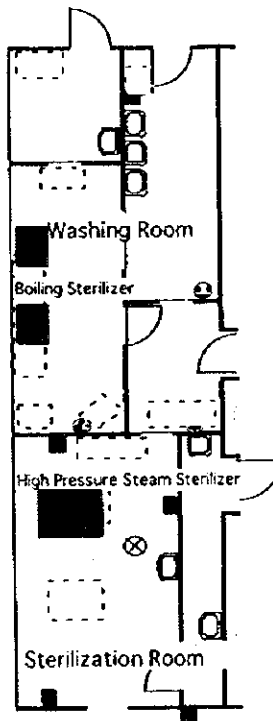
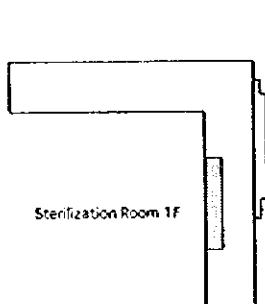
Operation Room



Sterilization Room

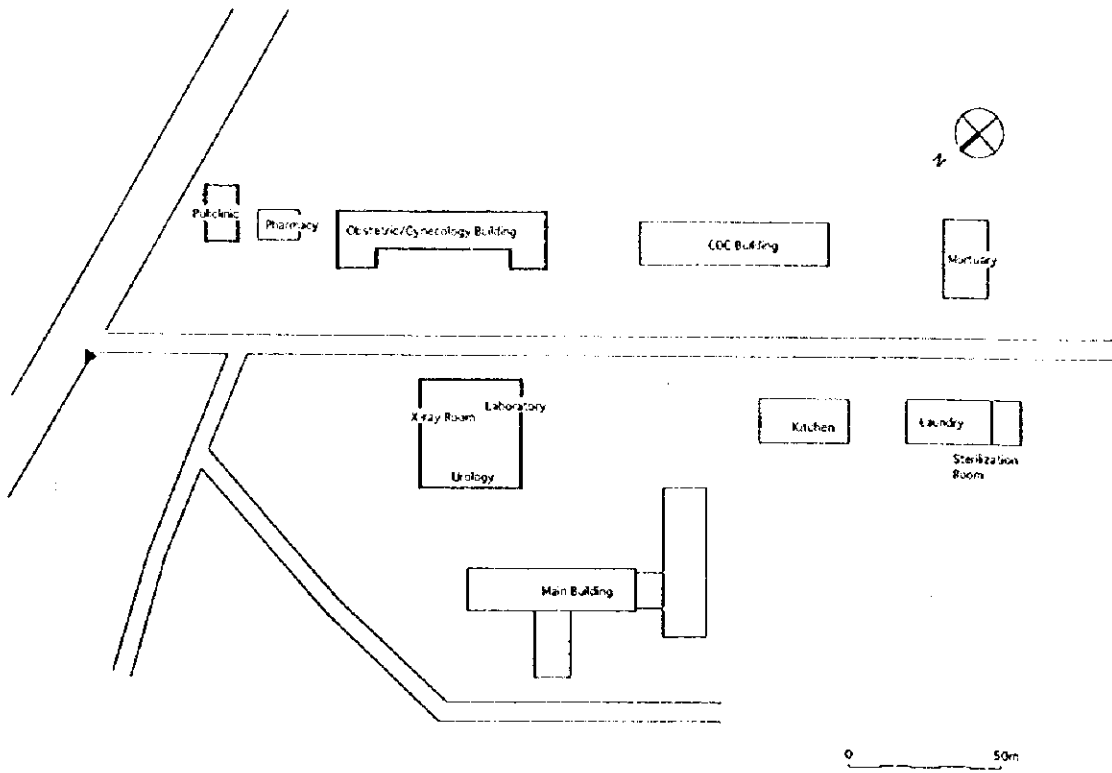


Operation Room

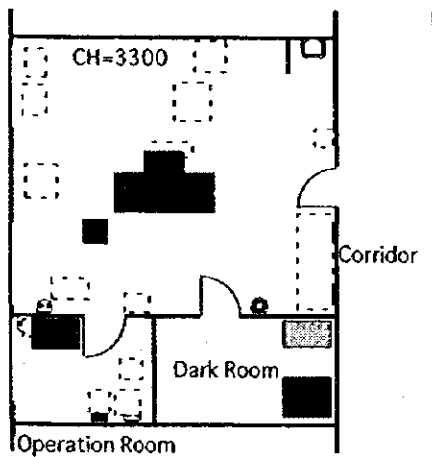
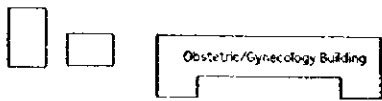


Sterilization Room

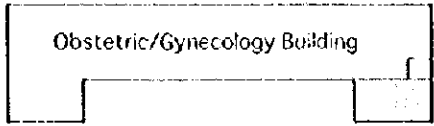
(3) Navoi Regional General Hospital



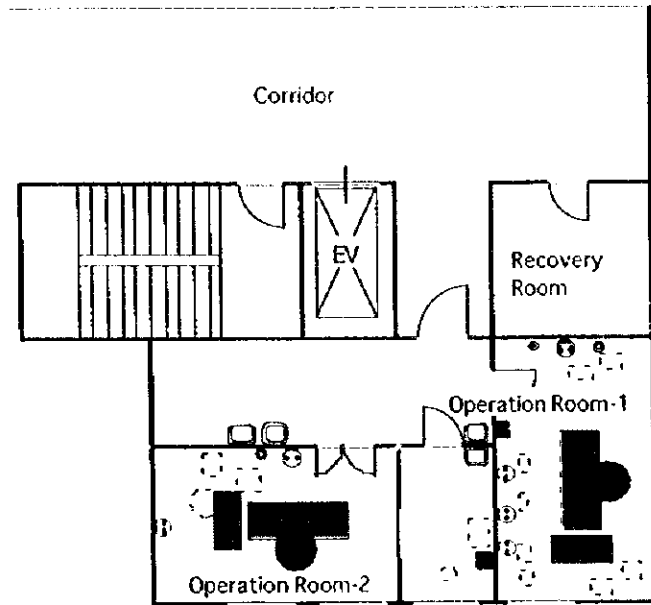
Location



X-ray Room

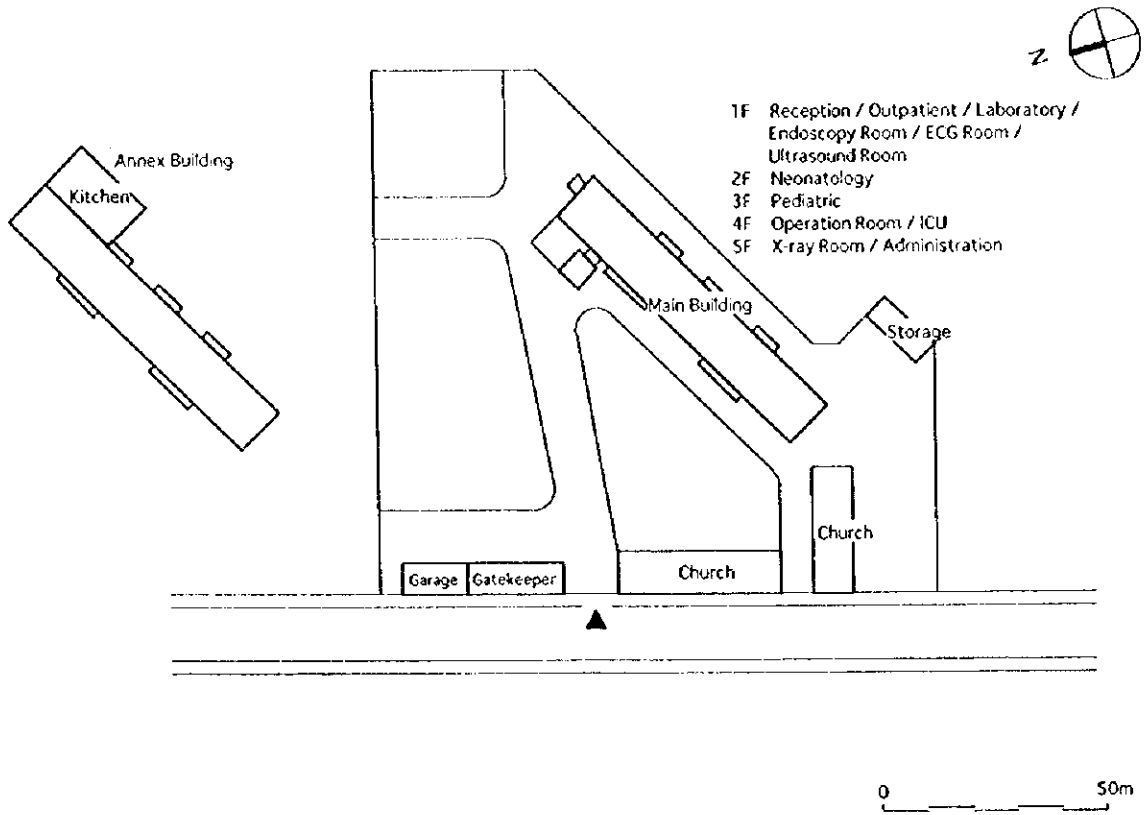


Operation Room 2F

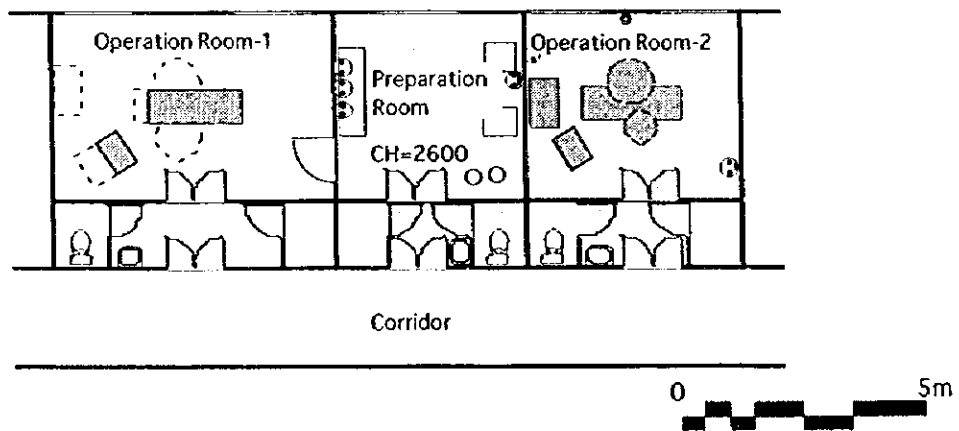
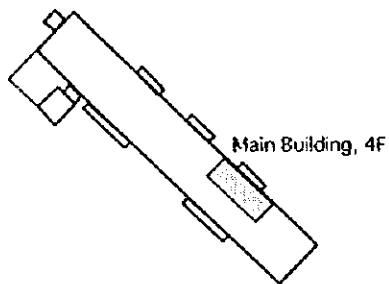


Operation Room

(4) Navoi Regional Children Hospital

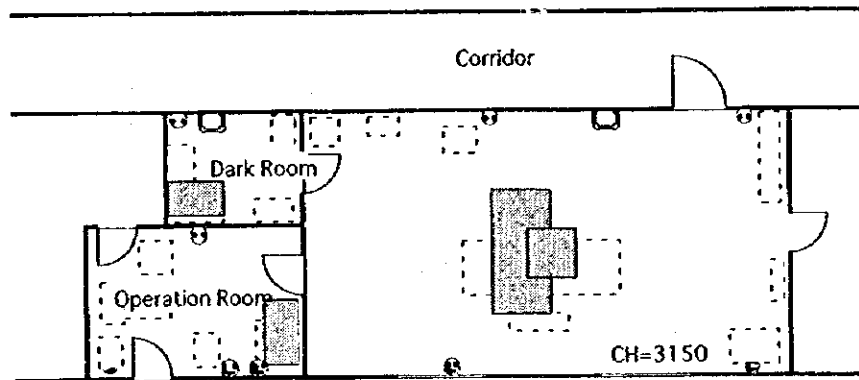
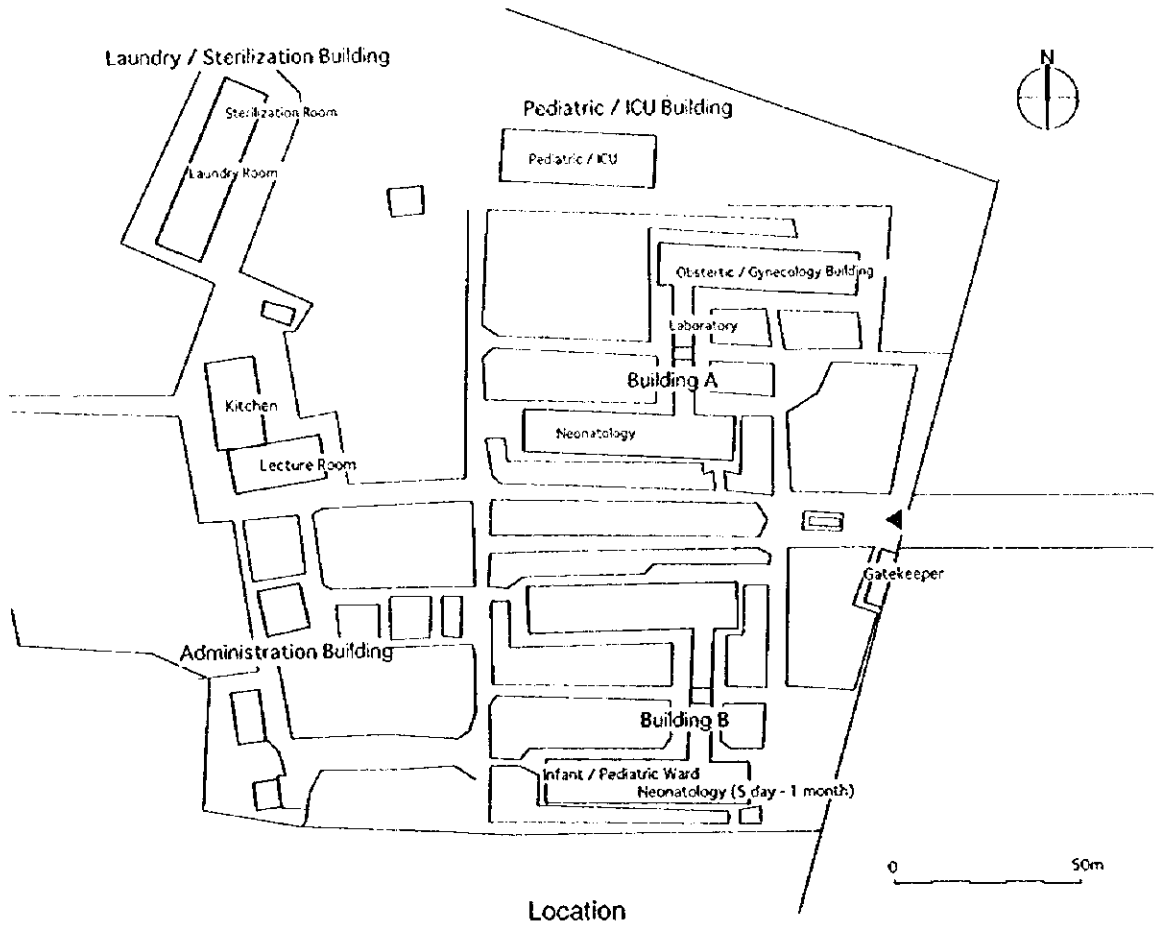


Location

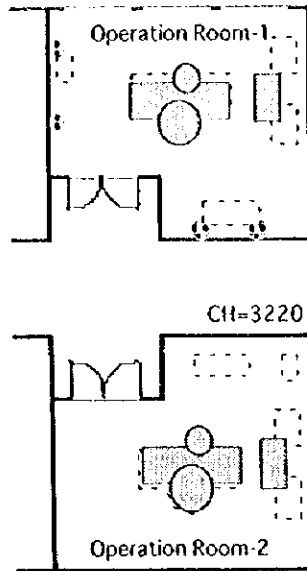
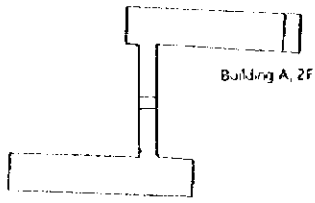


Operation Room

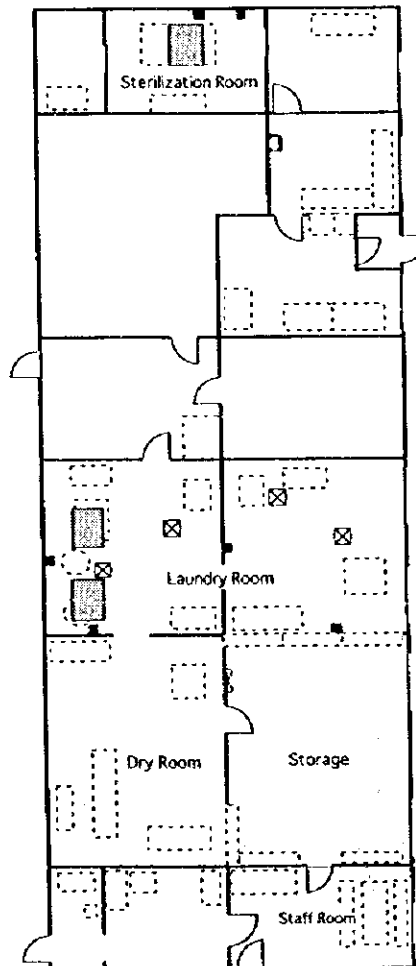
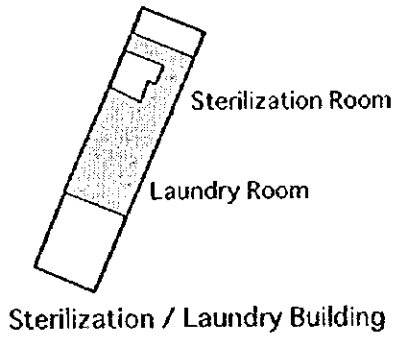
(5) Khatyrli District Central Hospital



X-ray Room



Operation Room



Sterilization Room / Laundry Room

The responsible persons in the hospitals under the project shall be requested to prepare the record of "medical service activity" of your hospital, and shall submit to Japanese side at least 5 years after the completion of the project.

- Form of Record -

Name of Hospital : _____
Name of Director : _____
Year Recorded : _____

1. Benefit / Cover Area (in Region)

Population covered by the Hospital: _____
Number of Total Population _____
Number of Women _____
Number of Children (under 14) _____
Number of Pregnant _____
Number of Neonats (born) _____

2. Tendency of Patients

2-1 Out-Patient

Total number of Out-Patient : _____

Leading (major) Tendency of Disease :

①

②

③

④

⑤

Other

% compared with previous year _____%

2-2 In-Patient

Total number of In-Patient : _____

Leading (major) Tendency of Disease :

①

②

③

④

⑤

Other

% compared with previous year _____%

3. Laboratory Testing

<u>Category</u>	<u>Number of Testing</u>
Biochemical (Protein, Hormone, Electrolyte etc.)	_____
Pathology (Bacterium, including virus)	_____
General Examination (Urine test etc.)	_____
Blood Test (Blood cell, serum, coagulation test etc.)	_____
Immunology (Antigen etc.)	_____
Blood Grouping Test	_____
Other Test (Specify)	_____

4. Clinical Examination

<u>Category</u>	<u>Number of Examination</u>
X-Ray	_____
Ultrasound	_____
ECG	_____
EEG	_____
Endoscopy	_____
Others (specify below)	_____

5. Surgical Operation

Number of Operation	_____
% compared with previous year (in total)	_____ %
Leading (major) Tendency of Surgical Operation :	
①	
②	
③	
④	
⑤	
Other	
% required whole anesthesia / ventilator	_____ %

6. Reanimation (ICU / Neonatology & Infant Care)

Total number of Patient	_____
% compared with previous year	_____ %
Number of Patient treated with Patient Monitor	_____
% of whole patients in Reanimation Room	_____ %
Number of Patient treated with Ventilator	_____
% of whole patients in Reanimation Room	_____ %
Number of Patient treated with Infant Incubator	_____
% of whole patients in Reanimation Room	_____ %
Number of Patient treated with Phototherapy unit	_____
% of whole patients in Reanimation Room	_____ %

7. Delivery Room

Number of Delivery _____
 % compared with previous year _____ %

8. Mortality Rate (in Hospital)

Maternal Mortality Rate _____
 Perinatal Mortality Rate _____

Infant Mortality Rate _____

9 Administration

9-1 Budget

<u>Category</u>	<u>Requested</u>	<u>Actual</u>	<u>%</u>
MOH's Subsidization	_____	_____	_____
or DOH's Subsidization	_____	_____	_____
Patient Fee (if any)	_____	_____	_____
Insurance Benefit (if any)	_____	_____	_____
Donation Found	_____	_____	_____
Others (specify)	_____	_____	_____
Total	_____	_____	_____

9-2 Expenditure

<u>Category</u>	<u>Expenditure</u>	<u>%</u>
Personnel	_____	_____
Pharmaceutical	_____	_____
Administration	_____	_____
Transportation	_____	_____
Food	_____	_____
Facility Maintenance	_____	_____
Medical Equipment	_____	_____
Others (Specify)	_____	_____
Total	_____	100

РЕСПУБЛИКА УЗБЕКИСТАН

**ПРОГРАММА ОСНАЩЕНИЯ ОБОРУДОВАНИЕМ
ЛЕЧЕБНО-ПРОФИЛАКТИЧЕСКИХ
СТАЦИОНАРНЫХ УЧРЕЖДЕНИЙ
ЦЕНТРАЛЬНОГО РЕГИОНА РЕСПУБЛИКИ**

**ДОКЛАД ПО
ТЕХНИКО-ЭКОНОМИЧЕСКОМУ ОБОСНОВАНИЮ ПРОЕКТА**

РЕЗЮМЕ

ЯНВАРЬ 1998 ГОДА

**ЯПОНСКОЕ АГЕНТСТВО МЕЖДУНАРОДНОГО
СОТРУДНИЧЕСТВА**

**АКЦИОНЕРНАЯ КОМПАНИЯ " БИНКО "
АКЦИОНЕРНАЯ КОМПАНИЯ " СИСТЕМ КАГАКУ
КОНСАРТАНТС "**

Резюме

В советский период в рамках общегосударственной системы здравоохранения в Республике Узбекистан существовала система, в рамках которой осуществлялись бесплатные медицинские услуги, лечение, санитарные мероприятия. Однако, после обретения независимости, по причинам тяжелого положения с государственными финансами и другим имеется серьезное снижение технологического уровня оснащения сферы здравоохранения, наблюдается дефицит в отношении предоставляемых услуг.

В Республике Узбекистан средняя продолжительность жизни составляет (по данным на 1990 год) 69.5 лет; во многом это объясняется тем, что смертность новорожденных (на 1991 год) находится на уровне 35.3 смертных случаев на 1000 новорожденных, что является высоким показателем. 60% процентов населения страны проживает в сельских районах, причем существует значительный разрыв в уровнях санитарии между городом и периферией, где наблюдается высокий уровень заболеваемости и смертности из-за антисанитарного состояния питьевой воды, недостаточной оснащенности санитарным оборудованием.

После обретения независимости Республикой Узбекистан в 1991 году ее Правительство проводило меры по реформированию медицины и здравоохранения; в качестве важной задачей прилагались особые усилия к усовершенствованию и усилению сферы здравоохранения, особенно - защиты материнства и детства. Причина, по которой данной сфере уделяют внимание заключается в том, что в Республике довольно высок уровень прироста населения, причем характерной чертой сферы охраны здоровья матери и ребенка является высокое количество родов с одновременно большой смертностью при родах; дети, не достигшие 14 - летнего возраста, составляют 41 % населения. Имеется в виду осуществление лечебно-профилактических и учебно-воспитательных мер в отношении женщин, находящихся в возрасте деторождения, что должно способствовать сохранению здоровья матери ребенка, содействовать улучшению демографической структуры населения. Благодаря активной деятельности правительства Республики Узбекистан после обретения ею независимости процент смертности рожениц и процент смертности новорожденных понижается. Однако, хотя смертность новорожденных снизилась до 29.6 на 1000 (данные за 1996 год), данный показатель не достиг установленного ВОЗом уровня для народного здравоохранения - 20 на 1000. Здесь, согласно сообщениям, наиболее распространенными причинами смертности детей, особенно новорожденных и не достигших годовалого возраста, является заболеваемость во время родов, заболевания органов дыхания, заболевания органов пищеварения, заражение инфекционными болезнями. Предпосылкой к этому является указанная выше необорудованность систем санитарной инфраструктуры общественного использования: водопровода, канализации и других, а вместе с тем и незрелость менталитета населения в отношении вопросов охраны здоровья.

Правительство Республики продвигает общегосударственную " Программу повышения уровня охраны здоровья матери и ребенка ", которая составлена исходя из того, что большинство заболеваний возможно предотвратить и при заблаговре-

менном лечении во многих случаях дело не дойдет до смертельного исхода. Однако, из-за затянувшейся экономической депрессии не осуществляется замена и переукомплектация медицинского оборудования в лечебных учреждениях, в то время как большая часть имеющегося оборудования устарела либо находится в непригодном для использования состоянии и требует срочной замены.

В данных условиях, вслед за выдвинутой в 1994 году " Программой оснащения педиатрическим медицинским оборудованием " (в столице Ташкенте) и "Программой оснащения медицинским оборудованием учреждений охраны здоровья матери и ребенка в восточной части Республики " (г.Андижан) 1995 года, правительство Республики обратилось к Японии с просьбой об оказании безвозмездной финансовой помощи. Это основывалось на результатах рассмотрения руководством Республики вопроса об обеспечении в срочном порядке необходимым медицинским оборудованием с целью восстановления рабочих функций медицинских учреждений в пяти пунктах : в центральной части Республики в Самаркандской области (Самаркандская детская больница, Самаркандский центр охраны здоровья матери и ребенка), где необходимо принятие мер в сфере защиты здоровья матери и ребенка, в Навоинской области (Больница Навои, Детская больница Навои, Центральная больница Хатарчинского района).

Правительство Японии приняло решение об осуществлении ТЭО проекта, и Японское агентство международного сотрудничества направило в Узбекистан группу ТЭО на срок с 9 сентября 1997 года по 13 октября 1997 года. Группа провела с представителями правительства Республики необходимые обсуждения, согласование и сбор материалов по содержанию и условиям осуществления указанных программ. Затем, после анализа в Японии и после разъяснения с 1 декабря по 14 декабря 1997 года в Узбекистане концепции ТЭО был составлен данный Доклад о результатах технико-экономического обоснования.

Необходимость и уместность осуществления указанных программ была в результате ТЭО признана, на основе следующих фактов:

- (1) Учреждения, которые являются основными объектами программ , расположены в двух крупных городах центральной части Узбекистана, являясь ключевыми в охране здоровья матери и ребенка. Реализация этих проектов будет иметь большое значение для продвижения " Программы повышения уровня охраны здоровья матери и ребенка ";
- (2)Техническое оборудование в учреждениях-объектах программ используется намного больше нормальных сроков службы, его изношенность вызывает застойное состояние сферы здравоохранения. Исходя из того, что данные объекты являются ключевыми в Узбекистане, срочно требуется восстановление их функций.
- (3) Оборудование, которое предполагается к поставке по данному проекту, будет иметь характер дополняющего и совершенствующего в отношении имеющегося в настоящее время; оно вполне сможет поддерживаться в рабочем состоянии, управляться и эксплуатироваться Республикой Узбекистан за свой счет; Узбекистан имеет для этого как

кадровые, так и технологические возможности.

(4) Проект имеет целью поддержать "Бейсик Хьюман Нидс", согласуясь с целями предоставления Японией безвозмездной финансовой помощи.

Относительно содержания просьбы, руководствуясь срочностью переоборудования и необходимостью, в программу была включена аппаратура, необходимая для педиатрических отделений, акушерских и гинекологических отделений, лабораторий клинических анализов, однако из программы были исключены компьютеры, копировальные машины и другое оборудование, используемое в подразделениях управления больничным хозяйством, а также автомобили скорой помощи, обеспечение которыми возможно организовать внутри Республики.

В отношении отбора аппаратуры за основу была взята следующая базовая концепция.

- 1) Оснащение диагностическим и лечебным оборудованием предусмотренных программами учреждений в отношении медицинских и лечебно-профилактических услуг для рожениц и новорожденных, не достигших годовалого возраста, то-есть предоставление оборудования для тех видов лечебно-профилактической деятельности, по которым имеется высокий уровень заболеваемости, причем это оборудование даст высокий эффект. При этом однако, программа не предусматривает поставку оборудования, требующего высоких расходов на содержание и техобслуживание - как в случае оборудования для комплексного лечения. Предоставляемая аппаратура, в принципе, предусматривает обновление и доукомплектацию уже существующего оборудования.
- 2) Проблемой медицинской и лечебно-профилактической деятельности предусмотренных в программах медицинских учреждений является, главным образом, малое выделение ассигнований и снижение функциональных возможностей оборудования из-за износа и нехватки общего количества аппаратуры. Планируется поставка базового оборудования для педиатрических отделений, отделений гинекологии и акушерства, лабораторий клинического анализа - используемых многими пациентами и где испытывается наибольшую потребность в оборудовании.
- 3) Будет выбрана аппаратура, которая не будет требовать особых расходов на эксплуатацию и обслуживание и которую можно будет эксплуатировать силами и возможностями учреждений - объектов программ. Исходя из сложности в Узбекистане с обеспечением в настоящее время иностранной валютой, аппаратура выбирается и из расчета, чтобы необходимые для нее препараты и расходные материалы было бы возможным закупать на месте за национальную валюту (сумы).
- 4) Исходя из легкости в эксплуатации и обслуживании, подготовленности медицинско-технического персонала, несложности в

обеспечении расходными материалами и т.п., основываясь на приоритетах с точки зрения цен и принимая в расчет сопоставимость с оборудованием, внедренным ранее по программам на 1994 и 1995 фин. гг., часть оборудования планируется закупить в третьих странах.

Ниже излагается список основной аппаратуры, которую планируется поставить согласно вышеуказанным программам

Основная аппаратура, предполагаемая к поставке

№	Наименование аппаратуры	Учреждения, указанные в плане					
		Самарканд- ская детская больница	Самарканд- ский центр защиты здоровья матери и ребенка	Главная больница области Навои	Детская больница Навои	Централь- ная боль- ница Хаварчин- ского рай- она	Общее кол-во аппара- туры
		Кол-во	Кол-во	Кол-во	Кол-во	Кол-во	
1	Наркозный аппарат (с аппаратом искусственного дыхания)	2	2	2	1	2	9
2	Стерилизатор	1	1	1	1		4
3	Билирубинометр (с гематокритной центрифугой)	1	1	1	1	1	5
4	Аппарат биохимического анализа	1	1	1	1		4
5	Стерилизатор посуды	1					1
6	Детский бронхофиброскоп	1		1	1	1	4
7	Очиститель для эндоскопа	2		1	1	1	5
8	Детский колонофиброскоп	1					1
9	Дефибрилятор		1	1	1		3
10	Стол для родов	1	4	5		4	13
11	Рентгеновская установка (с ТВ монитором)	1	1	1		1	4
12	Электрокардиограф (6 канальный)	1	1	1	1	1	5
13	Электроэнцефалограф	2		1	1		3
14	Электрохирургический аппарат	2	2	2	2	2	10
15	Стол для эндоскопических исследований	2		1	1	1	5
16	Выжимальное устройство		1			2	5
17	Монитор наблюдения за эмбрионом	1	1	1		1	3
18	Набор для проявления фото пленки	1	1	1		1	4
19	Гастроинтестинальный фиброскоп для детей	1		1	1	1	4
20	Очиститель для стеклянных приборов	1	1	1	1	1	5
21	Автоклав (со встроенным паровым бойлером)	2	1			1	4
22	Стерилизатор (вертикальный, диаметр 40 X 65 см)			1			1
23	Детский инкубатор	3	2	2	2	3	12
24	Прибор искусственного дыхания, для новорожденных	1	1	1	1	1	5
25	Отопитель, детский	2	3	3	2	3	13
26	Инфузионная помпа	2	3	3	2	2	12
27	Лапароскоп		1	1			2
28	Источник света, для фиброскопа	2		1	1	1	5
29	Аппарат наблюдения за новорожденными	1	1	1	1	1	5
30	Лампа бестеневая (2, для подвешивания на потолке)	2		2	1		5
31	Операционный стол	2	2	2	2	2	10
32	Прибор наблюдения за больным	5	2	4	4	2	17
33	Набор операционного инструмента		3	3		4	10
34	Набор операционного инструмента, педиатрический	4			4		8
35	Набор операционного инструмента (для кес. сечения)		4	4		4	12
36	Набор ТВ мониторов для эндоскопии	1					1
37	УЗИ аппарат (доплеровский, с принтером)	1	1	1	1	1	5
38	УЗИ аппарат (малый)	1	1	1	1	1	5
39	Цистоуретроскоп, педиатрический	1			1	1	3
40	Прибор искусственного дыхания, для взрослого			2			2
41	Стиральная машина (30 кг)	2	1			2	5
42	Настольный стерилизатор	3	3	3	3	3	15

Органом, который будет осуществлять данную программу, является Министерство здравоохранения Республики Узбекистан; за непосредственное проведение необходимых работ и мероприятий будет отвечать Департамент защиты здоровья матери и ребенка данного Министерства. После поставки оборудования его эксплуатацией и обслуживанием на коммерческой основе будет заниматься "Узмедтехника" (полугосударственное предприятие; до 1996 года - подразделение Министерства здравоохранения). Планируемое оборудование было выбрано из числа того, которое будет находиться в рамках возможностей обслуживания и ремонта для существующей системы. И даже при выходе за эти рамки вопросы ее ремонта возможно будет решить силами "Узмедтехники" на месте или через представительство этой организации в Москве. Поэтому можно утверждать, что особых проблем с обслуживанием и ремонтом оборудования по завершении плановых мероприятий не будет.

Период проведения работ, составляет: 5,2 месяца на детализированное проектирование и тендерные процедуры; 6,5 месяцев на поставку оборудования - всего 11,7 месяцев.

Доля расходов со стороны Республики Узбекистан составит сметно 1,1 млн йен, которые пойдут на проведение ремонта комнат для установки рентгеновской аппаратуры на 4 планируемых объектах.

Вместе с тем, после завершения данного проекта обслуживание и ремонт предоставленной аппаратуры по 5 больницам в совокупности ежегодно потребует 11,5 млн. йен на закупку запчастей, расходного материала, техническое обслуживание. Сумма этих расходов составляет 43% (средний показатель) бюджета ежегодных расходов (данные на 1996 год) на содержание и обслуживание каждого из учреждений - объектов программ; однако, Министерство здравоохранения Узбекистана обещало увеличение бюджета этим учреждениям - объектам программ, так как они являются главными центрами, куда направляют пациентов на внешнее консультирование и лечение для лечебно-профилактических учреждений в каждом из своих районов. Кроме того, администрации Самаркандской и Навоинской областей также обещали выделять ежегодно спецбюджеты в размере 100 тыс.долларов (примерно 12 млн.500 тыс.йен) и 150 тыс.долларов (примерно 18 млн.750 тыс.йен), соответственно, на содержание предоставляемой по данному проекту аппаратуры. Поэтому, основываясь на вышеуказанном, можно констатировать, что дополнительные расходы, связанные с содержанием и обслуживанием аппаратуры, Республика Узбекистан выделить сможет.

От осуществления данного проекта ожидаются следующие результаты и эффект:

- 1) Все учреждения - объекты программы расположены в городах двух крупных областей и являются важными государственными медицинскими организациями, где детям и беременным женщинам из слоев населения с невысоким доходом может быть предоставлено качественное медицинское обслуживание. Благодаря осуществлению данного проекта, можно добиться улучшения качества обслуживания и расширения его рамок и масштабов в отношении рядовых граждан. Если говорить конкретно, то 1 300 тысяч человек (40% населения области), проживающих в Самаркандской области (женщины, по возрасту способные к

деторождению и дети) получают пользу от осуществления проекта.

- 2) Указанные в программах учреждения являются одновременно организациями, где имеется интернатура. Оснащение оборудованием, предусмотренным в данных программах, послужит восстановлению рабочих функций каждого из учреждений, и, будет эффективно с точки зрения подготовки кадров медицинских работников.
- 3) Также, благодаря предоставлению новой аппаратуры ожидается расширение масштабов и рамок лечебной и медико-профилактической деятельности учреждений - объектов программ. Говоря конкретно, при проведении этими учреждениями точной диагностики, адекватного лечения будет восстановлено доверие к ним как к центральным лечебным заведениям со стороны местного населения; пациенты будут иметь возможность получить адекватный диагноз и лечение на начальном этапе заболевания.

Таким образом, как вытекает из вышесказанного, от осуществления рассматриваемого плана ожидается большой эффект; в связи с тем, что содержание и обслуживание аппаратуры находится в пределах достигаемого, реализация данного проекта представляется уместной.

Наряду с этим, для того, чтобы работы в рамках проекта сделать более эффективными, важно усовершенствовать и оборудовать следующее:

Данный проект имеет целью поставку недостающего оборудования для совершенствования медицинской деятельности учреждений, являющихся объектами программ. Таким образом, он осуществляет фланговое содействие " Программе повышения уровня охраны здоровья матери и ребенка ", продвигаемой Республикой Узбекистан. Однако эта Программа не может быть успешно реализована только за счет оборудования материальной стороны лечебно-профилактической деятельности. Следует полагать, что со стороны Республики Узбекистан требуются срочные организационные меры - повышение трудового менталитета работников сферы здравоохранения, повышение качества медобслуживания, воспитательная работа с населением по вопросу здравоохранения, создание низкочастотной модели с ранней диагностикой и ранним лечением.

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