

4.3 Basic Plan

4.3.1 Equipment Plan

Based on the project background and objective, including current medical service levels for each proposed hospital, equipment to be procured under the project was selected by following the principles and conditions stated in Sections 4.1 and 4.2. A list of selected equipment is provided on the following page.

4.3.2 Proposed Facilities

Facilities proposed under the project are, Luxor Hospital, Qena Hospital, Nag Hammadi Hospital, Farshut Hospital, Qift Hospital and Isna Hospital.

Table 4.3.1 Equipment Plan

Unit : set

No.	Name of Equipment	Luxor	Qena	Nag Hammadi	Far- shut	Qift	Isna	Total
	[Anaesthesia Dept.]							
1-1	Anaesthesia machine	2	3	2	2	1	4	14
1-2	Ventilator for anaesthesia	2	3	2	2	1	4	14
1-3	Defibrillator	1	1	1		1	1	5
1-4	Patient monitor	1	2	1		1	2	7
1-5	Surgical suction apparatus				2			2
	[Blood Bank]							
2-1	Blood bank refrigerator		1	1		1		3
2-2	Tabletop centrifuge	1	1	1	1	1	1	6
2-3	Lab. incubator	1	1	1	1	1	1	6
2-4	Hot air oven for sterilization	1	1	1	1	1	1	6
2-5	Binocular microscope	1	1	1	1	1	1	6
	[Cardiology]							
3-1	ECG stress test unit with treadmill	1	1					2
	[C. C. U.]							
4-1	Patient monitor	2	2			1	2	7
4-2	Ventilator	2	2			1	2	
4-3	Volumetric infusion pump	2	2			1	2	7
4-4	Continuous syringe infusion apparatus	2	2			1	2	7
4-5	External demand pace maker	1	1					2
4-6	C. C. U. bed		2			1	2	5
4-7	Surgical suction unit	1	1			1	1	4
4-9	Mobile X-ray	1	1				1	3
	[Chest]							
5-1	X-ray mirror camera system	1		1				2
5-2	X-ray system	1		1				2
5-3	Lab. incubator	1						1
5-4	Hot air oven	1						1
5-5	Centrifuge	1						1
5-6	Steam autoclave	1		1				2
5-7	Sensitivity disc dispenser	1		1				2
5-8	Colony counter	1		1				2
5-9	Spectrophotometer(U. V.)	1						1
5-10	Water distiller	1		1				2
	[Dental Surgery]							
6-1	Dental unit with chair	2		1			1	4
6-3	Ultrasonic scaler	1		1			1	3
6-4	Examining light	1					1	2
6-5	Amalgamater	1		1				2
6-6	Hot air sterilizing oven				1			1
6-7	Dental X-ray apparatus						1	1
6-8	Amalgamizer						1	1
6-9	Dental mixer	1						1

No.	Name of Equipment	Luxor	Qena	Nag Hammadi	Far- shut	Gift	Isna	Total
6-10	Lab. lathe	1						1
6-11	Sand plaster	1						1
6-12	Vibrator	1						1
6-13	Articulator	1						1
6-14	Micromotor	2						2
6-15	Trimer	1						1
	[Endoscopy unit]							
7-1	Colono fiberscope	1	1					2
7-2	Light source	1	1				1	3
7-3	Fiberscope cleaning machine	1	1				1	3
7-4	Fiberscope cabinet	1	1				1	3
7-5	Gastroscope						1	1
7-6	Sigmoidoscope						1	1
	[E. N. T.]							
8-1	Bronchoscope(rigid type)	1	1	1				3
8-2	Eoesphagoscope	1	1	1				3
8-3	Light source	1	1	1				3
8-4	Operating microscope for E. N. T.	1	1					2
8-5	Audio meter	1	1	1				3
8-6	Tympanometer	1	1	1				3
8-7	Sound proof room	1	1	1				3
8-9	ENT Examination/treatment unit	1	1	1	1			4
	[G. Y. N.]							
10-1	Hysteroscope	1						1
	[Histopathology lab.]							
11-1	Automatic tissue processor	1						1
11-2	Fleezing microtome	1						1
11-3	Binocular microscope	1						1
	[Internal Medicine]							
12-1	E. C. G. recorder 1 channel	2	2	1	1	1	2	9
12-2	Ultrasonic nebulizer	1	1	1	1	1	1	6
	[I. C. U.]							
13-1	Ventilator	1		1	1		1	4
13-2	Volumetric infusion pump	1	1	1	1		1	5
13-3	Syringe infusion pump	1	1	1	1		1	5
13-4	Patient monitor		1	1	1		1	4
13-5	Patient monitor with ECG recording function		1	1	1		1	4
13-6	Surgical suction apparatus	1	1	1	1		1	5
13-8	I. C. U. bed			2	2		2	6
13-9	Oxygen generator	1	1	1	1		1	5
	[Medical Lab.]							
15-1	U. V. Spectrophotometer	1	1	1	1	1	1	6
15-2	Coagulometer	1	1	1				3
15-3	Lab. incubator	1	1	1	1	1	1	6

No.	Name of Equipment	Luxor	Qena	Nag Hammadi	Far-shut	Qift	Isna	Total
15-4	Binocular microscope	2	2	2	1	2	2	11
15-5	Water distilling apparatus	1	1	1	1	1	1	6
15-6	Tabletop centrifuge	2	2	2	1	1	2	10
15-7	Automatic blood cell counter	1		1				2
15-8	Hot air oven	1	1	1	1	1	2	7
15-9	Steam autoclave	1	1					2
15-10	Blood gas analyzer	1	1	1	1		1	5
15-11	Flame photometer for Na, K	1	1	1	1		1	5
15-12	Water bath		1	1		1	1	4
15-13	Elisa photometer			1	1			2
15-14	Ph meter			1				1
15-15	Hemoglobin meter [Obstetrics]	1	1	1	1	1	1	6
16-2	Ultrasound machine	1	1	1	1	1	1	6
16-3	Foetal heart detector	1	1	1	1	1	1	6
16-4	Delivery table	1		1	1	1	1	5
16-5	Infant warmer unit	1	1	1	1		1	5
16-6	Operating table	1					2	3
16-7	Operating lamp mobile type	1						1
16-8	Operating ceiling lamp						2	2
16-9	Electro-surgery unit						2	2
16-10	Surgical suction apparatus						2	2
16-11	Emergency operating lamp with battery [Operating theatre/surgery]						2	2
17-1	Operating table for general surgery	2	2	2	2	1	2	11
17-2	Surgical suction apparatus	3	4	3	2	2	2	16
17-3	Electro-surgery unit 300W	2	2	2	2	1	1	10
17-4	Electro-surgery unit 400W	1	1	1			1	4
17-5	Laparoscope unit	1	1	1	1			4
17-6	Orthopaedic operation table						1	1
17-7	Operating table for obstetric/gynecology		1				1	2
17-8	Emergency operating lamp with battery		2				2	4
17-9	Operating ceiling lamp		3	2	2	1	2	10
17-10	Surgical microscope		1					1
17-11	Patient monitor				1			1
17-12	Defibrillator [Ophtalmology]				1			1
18-1	Operating microscope for ophtalmology	1						1
18-2	Electro-surgical unit	1						1
18-3	Ophtalmic examination unit with slit lamp	1		1	1	1	1	5
18-4	Ophtalmoscope, electric			1	1	1	1	4
18-5	Ophtalmoscope fison type			1			1	2
18-6	Lensemeter	1		1	1	1	1	5

No.	Name of Equipment	Luxor	Qena	Nag Hammadi	Far- shut	Qift	Isna	Total
18-7	Operating lamp for ophtalmology [Orthopaedics]					1	1	2
19-1	Surgical X-ray unit	1	1					2
19-2	Orthopaedic operating table	1	1	1				3
19-3	Pneumatic drill	1	1	1			1	4
19-4	Electric plaster saw	2	2	2	1	1	1	9
19-5	Electric air touniquet [Paediatrics]	1	1	1			1	4
20-5	Bilirubinometer	1	1	1	1	1	1	6
20-6	Phototherapy apparatus			2	2	1	2	7
20-7	Neonatal monitor	1	1	1	1		1	5
20-8	Surgical suction apparatus			1	1			2
20-9	Volumetric infusion pump			1	1			2
20-10	Resucitator unit for infant			1	1		1	3
20-11	Oxygen analyzer	1	1	1	1	1	1	6
20-12	Ultrasonic nebulizer [Physiotherapy]	1	1	1	1	1	1	6
21-1	Parafin wax bath	1			1			2
21-2	Microwave therapy apparatus	1						1
21-3	Shortwave therapy apparatus		1	2	2		2	7
21-4	Computarized traction unit	1	1	1				3
21-5	Didynamic apparatus		1	1	1		1	4
21-6	Theraputic ultrasound machine		1	1	1		1	4
21-7	Interferential therapy unit		1	1				2
21-8	Treadmill for rehabilitation	1	1	1				3
21-9	Bicycle stationary [Plastic Surgery]			1				1
22-1	Dermatome for skin graft apparatus	1						1
22-2	Skin mesher apparatus [Radiodiagnosis]	1						1
23-1	Diagnosis ultrasound machine	1	1	1	1	1	1	6
23-2	Diagnostic X-ray TV system		1					1
23-3	Diagnostic stationary X-ray system		1		1	1		3
23-4	Automatic film processing machine	1	1	1				3
23-5	Diagnostic X-ray system(w/ bucky table & chest stand)			1			1	2
23-6	Cassette pass-box [Skin & Venerials]		1	1			1	3
24-1	Dermo jet intradermal injector	1					1	2
24-2	Ultraviolet lamp [Supportive service]			1				1
25-1	Automatic electric emergency generator 100KW			1	1		1	3

No.	Name of Equipment	Luxor	Qena	Nag Hammadi	Far- shut	Qift	Isna	Total
25-2	Automatic electric emergency generator 50KW [Theatre sterilization room]					1		1
26-1	Scrub-up unit	2	2	2			2	8
26-2	Instrument washer, moderate size	1						1
26-3	Steam autoclave with steam generator 250ℓ	1					2	3
26-4	Steam autoclave with steam generator 100ℓ			2	2	1	1	6
26-5	Hot air sterilizing oven (big size) 100ℓ [Urology]				1		2	3
27-1	Cysto-urethroscope for adult and child [Milk Kitchen]	1	1	1	1		1	5
28-1	Hot air oven sterilizer(big size)						1	1
28-2	Steam autoclave with steam generator 100ℓ [Luxor Fever Hospital]	1					1	2
29-1	X-ray machine with bucky table	1						1
29-2	Incubator, table top type	1						1
29-3	Hot air oven	1						1
29-4	Electric table top centrifuge	1						1
29-5	Sensitivity disc dispenser	1						1
29-6	Steam autoclave with steam generator 100ℓ	1						1
29-7	Electro photometer	1						1
29-8	Binocular microscope	1						1
29-9	Water distiller	1						1

4.3.3 Major Planned Equipment

Major equipments chosen for this project are shown in the following table. The specification of each equipment is described as well.

Major equipment	Major specifications
Anaesthesia machine	Closed circuit type, halothane vaporizer, With BP instrument
Defibrillator	Portable type, output: 300 joules and over, synchronus discharge, ECG recording available
ECG stress test unit	Stresstest, with alarms of arrhythmia with treadmill, ST, B.P
Patient monitor	Display of ECG, HR, BP and oxygen saturation, degree as well as ECG recording
Ventilator	Volume control type, compressor built-in, I/E rate: 1:2
Mobile X-ray	100KV/300MAS and over, battery or condenser type
Chest X-ray mirror camera system	125KV/300mA and over, with mirror type of fluorography camera, roll film 10x10cm
Chest X-ray system	100KV/300mA and over, Bucky wall stand, Bucky table
Steam autoclave (small size)	100 L, with steam generator
Steam autoclave (large size)	250 L, with steam generator
Spectrophotometer	400/800mm, double beam type
Water distiller	Distilled water: 4L/H and over Inexchanged water : 0.4L/Min and over
Dental unit (with chair)	Air motor, air turbine type hand piece, with patient chair
Colonofiberscope	Working length: 1,330 mm(approx.) Field view : 120° Field distance : 5 - 100mm

Gastroscope	Working length: 1,000 mm(approx.) Field view : 105° Field distance : 5 - 100mm
Sigmoidoscope	Working length: 765 mm(approx.) Field view : 100° Field distance : 5 - 120mm
Operating microscope for E.N.T	Hight of stand: 1,700 mm(approx.), up-down movement: 600 mm (approx.), binocular type, enlargement ratio: 6x, 10x, 16x, 25
Tympanometer	Portable type, tone : cycle= approx. 226Hz, Level=85dBSPL approx. Pressure range: from +200 to -400daPa
ENT examination/ treatment unit	Pacient chair(Hydraulic type), illumination lamp, suction unit, provided with cauter and pharyngoscope
Hysteroscope	Rigid type, optical transmission type with light source
Fleezing microscope	Adjustable from -5° to 30° C, rotary type
Oxygen generator	Concentration at 1 L/Min generation: over 95%
Blood gas analyzer	The analysis results of pH , P_{CO_2} , P_{O_2} etc. in the blood are used for respiration function control and respiration monitoring during operation.
Flame photometer	Automatic measurement of natrium value and calium value
Elisa photometer	For 96 hole plate, manual type
Ultrasound machine	Portable type, linear scanning system, image print available
Operating table for general surgery	Oil-hydraulic type, tabletop: 45cm(approx.)x190cm, up-down movement: 75cm - 100cm, each position available

Electro-surgery unit	Bipolar and monopolar available, selection type of coagulation, dissection and combination
Laparoscope unit	Rigid type provided with forcep (rigid type and flexible type), optic fiber, available for diagnosis and therapy
Orthopedic operation table	Same type with operating table for general surgery, with removable traction unit for lower extremity
Surgical microscope	Binocular type, zoom type: 5 - 25x, foot pedal controlled type
Ophthalmic examination unit with slit lamp	Provided with patient chair
Interferential therapy unit	Max. output: 80V, max. electric current: 45mA, interferential cycle: 0 - 100Hz, interferential modification: choice of 1, 2, 3, 4.5 seconds cycle
Treadmill for rehabilitation	Walking speed: 0.3 - 10 Km/H(approx.), inclining angle: alternative of 0° and 25°, speed indicator: 0 - 9.9 Km, with timer
Diagnosis ultrasound machine	Electronic scanning for convex and linear type, display: B mode, M mode, B/M mode, image print available
Diagnostic X-ray TV system	125 - 150 KV, 500 mA, remote/table side controlled type, inclining angle : 90° /15° , available for photographing different spots, I.I. size: over 9"
Diagnostic X-ray system with bucky table and chest stand	Ditto, but excluding TV system function
Diagnostic stationary X-ray system	100 - 125KV, over 300mA, bucky

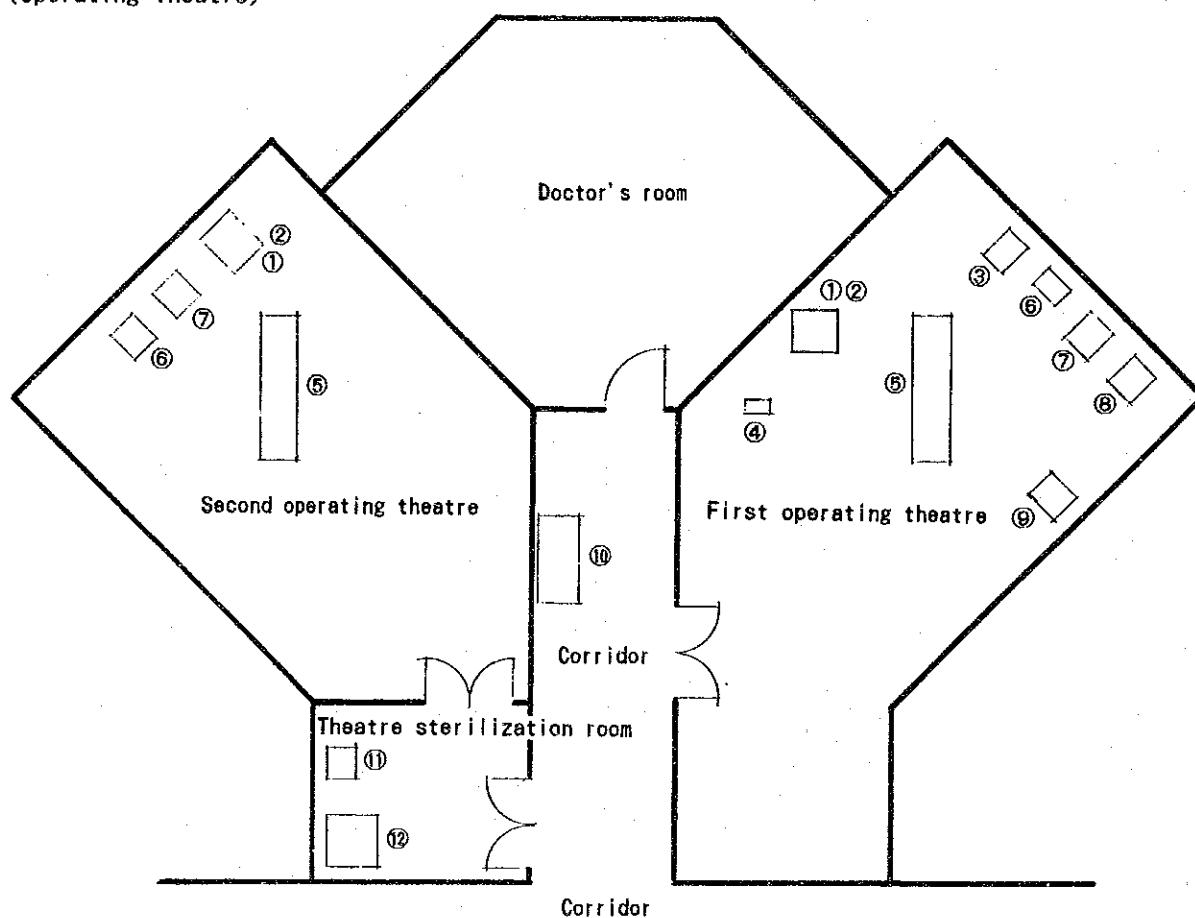
Automatic film processing machine	Continious roller transport type. Available developping dimensions: 35x35cm - 10x10cm, standard processing time: 90 seconds
Automatic electric emergency generator (A)	100KVA, diesel engine
Ditto (B)	30KVA, diesel engine
Scrub-up unit	Available for 2 persons
Cysto-urethroscope	Rigid type, optical transmission type with power source, for adult and infant

4.3.4 Layout of Major Equipment

Following Figs show the layout plan of the major equipment to be procured.

Fig. 4.3.4(1) Layout Plan of Major Equipment in Luxor Hospital

(Operating Theatre)



① Anaesthesia machine	2 units	⑩ Scrub-up unit	1 unit
② Ventilator	2 units	⑪ Instrument washer	1 unit
③ Defibrillator	1 unit	⑫ Steam autoclave (250 ℓ)	1 unit
④ Patient monitor	1 unit		
⑤ Operating table for general surgery	2 units		
⑥ Surgical suction apparatus	2 units		
⑦ Electro-surgery unit (medium)	2 units		
⑧ Electro-surgery unit (large)	1 unit		
⑨ Laparoscope	1 unit		

Fig. 4.3.4(2) Layout Plan of Major Equipment in Qena Hospital (1)

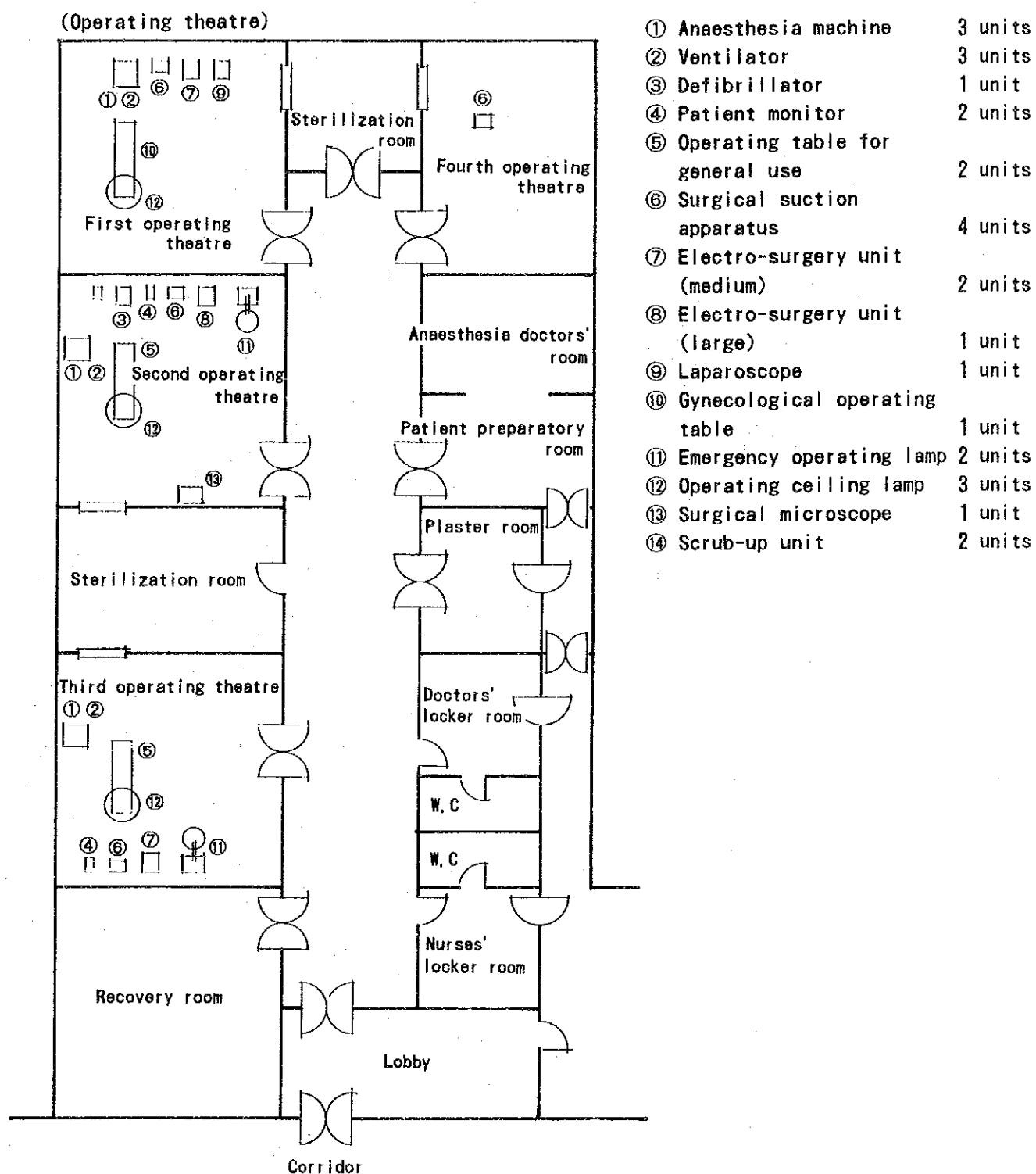
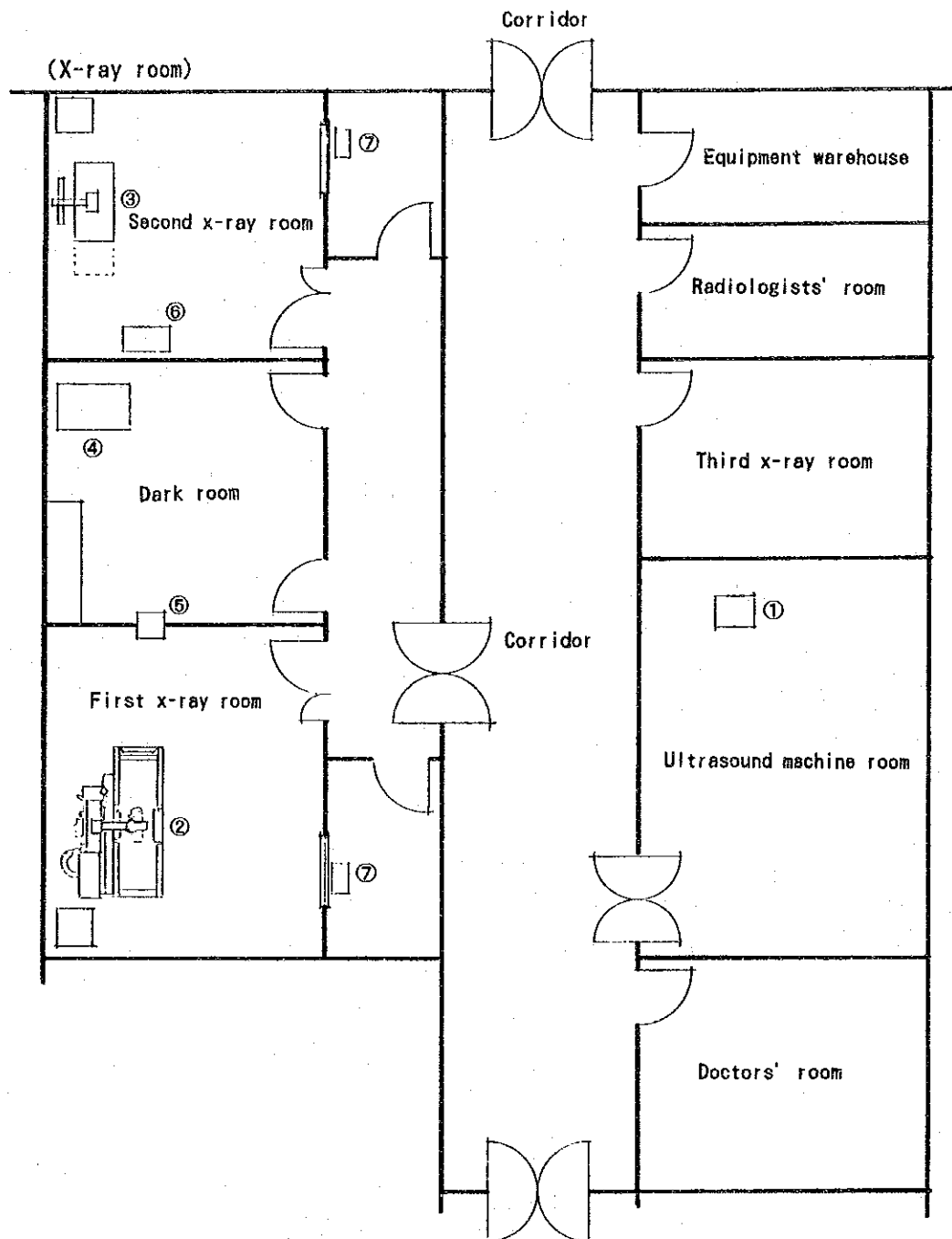


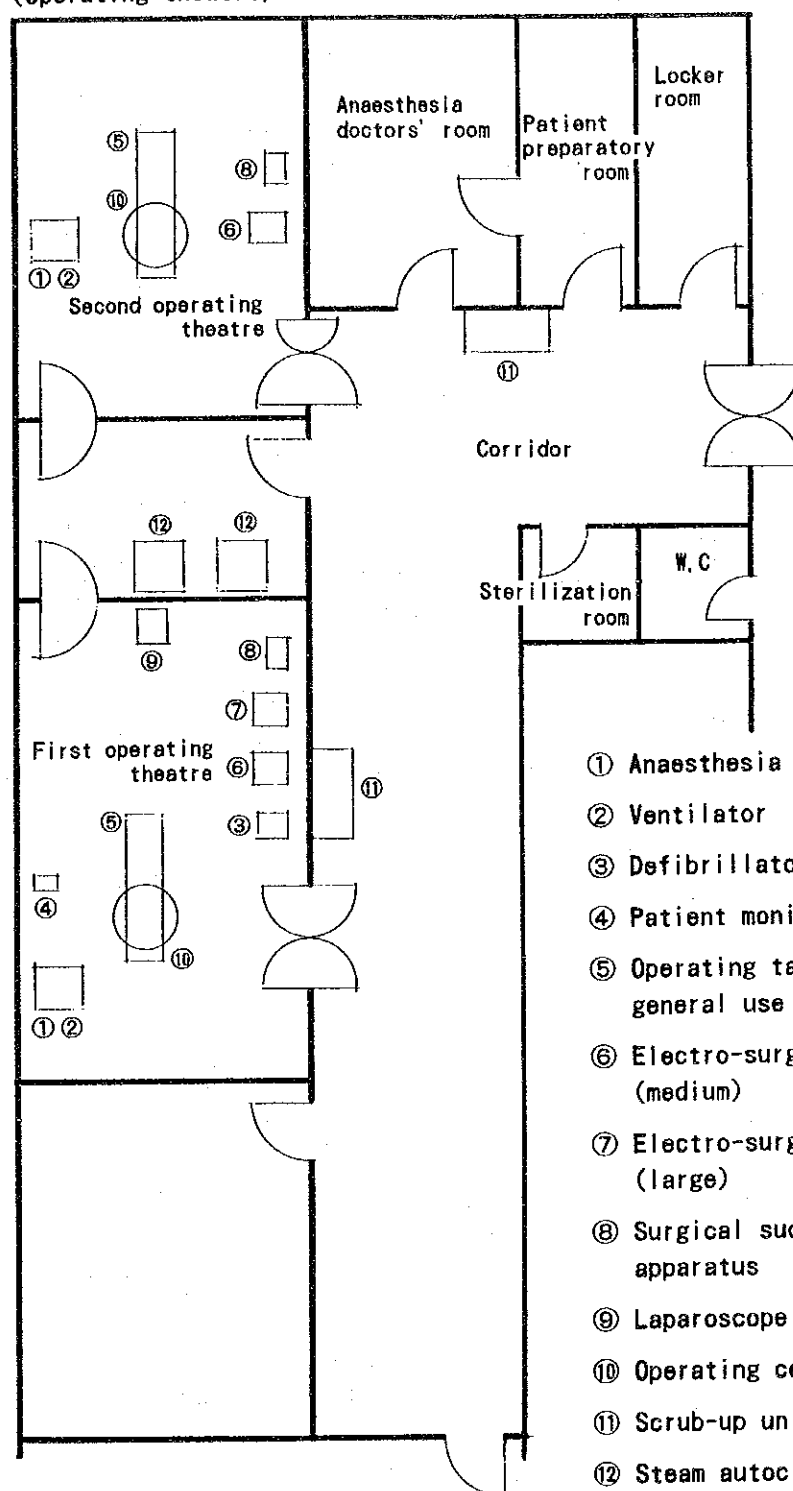
Fig. 4.3.4(3) Layout Plan of Major Equipment in Qena Hospital (2)



- ① Ultrasound machine
- ② Diagnostic x-ray TV system
- ③ Diagnostic stationary x-ray system
- ④ Automatic film processing machine
- ⑤ Cassette pass-box
- ⑥ Bucky stand
- ⑦ Control panel

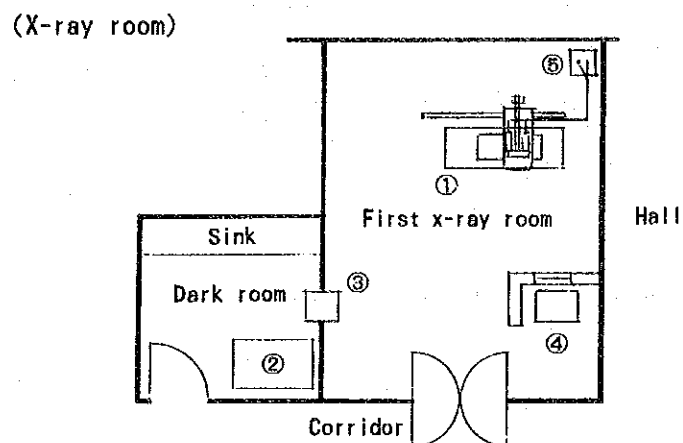
Fig. 4.3.4(4) Layout of Major Equipment in Nag Hammadi Hospital (1)

(Operating theatre)



① Anaesthesia machine	2 units
② Ventilator	2 units
③ Defibrillator	1 unit
④ Patient monitor	1 unit
⑤ Operating table for general use	2 units
⑥ Electro-surgery unit (medium)	2 units
⑦ Electro-surgery unit (large)	1 unit
⑧ Surgical suction apparatus	3 units
⑨ Laparoscope	1 unit
⑩ Operating ceiling lamp	2 units
⑪ Scrub-up unit	2 units
⑫ Steam autoclave	2 units

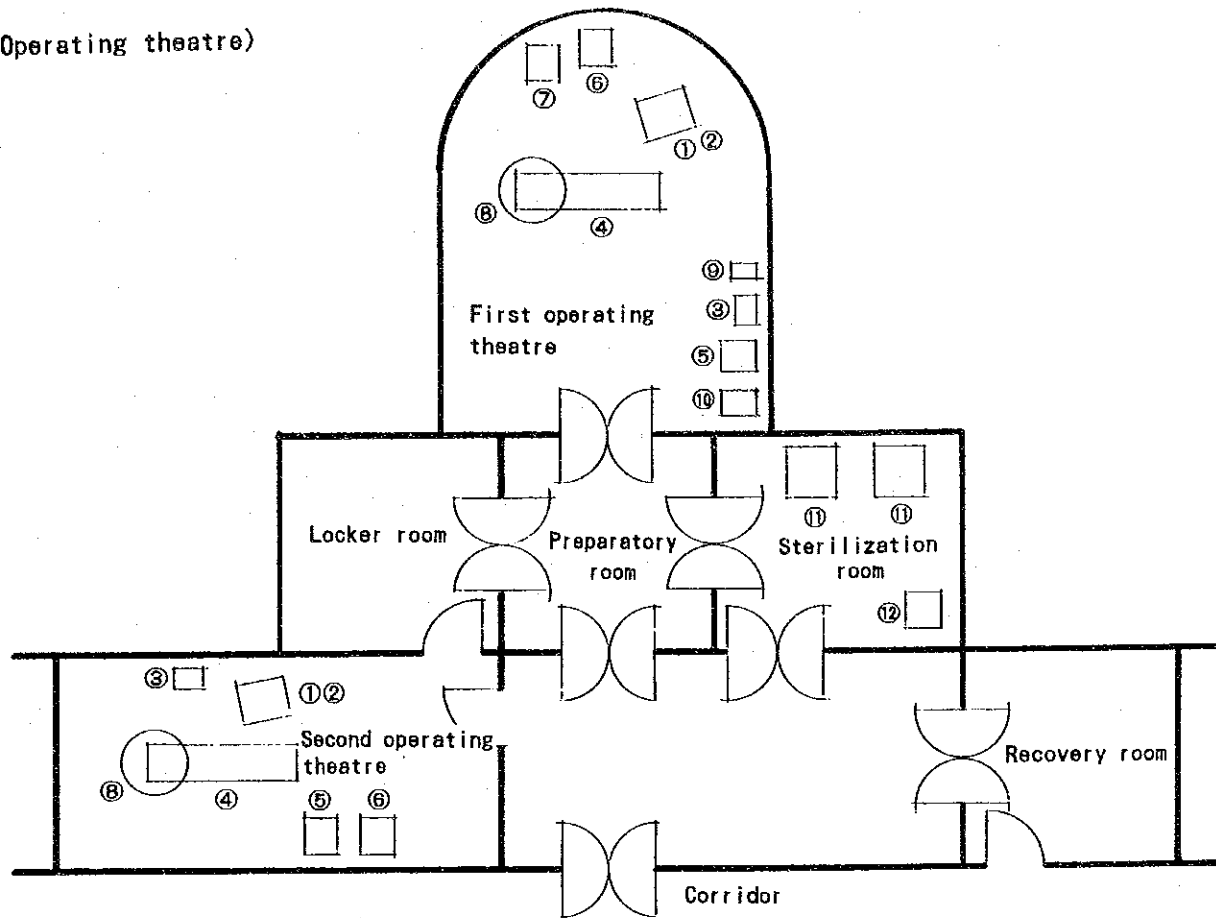
Fig. 4.3.4(5) Layout of Major Equipment in Nag Hammadi Hospital (2)



- ① Diagnostic x-ray system (with bucky table and chest stand)
- ② Automatic film processing machine
- ③ Cassette pass-box
- ④ Control panel
- ⑤ High tension generating system

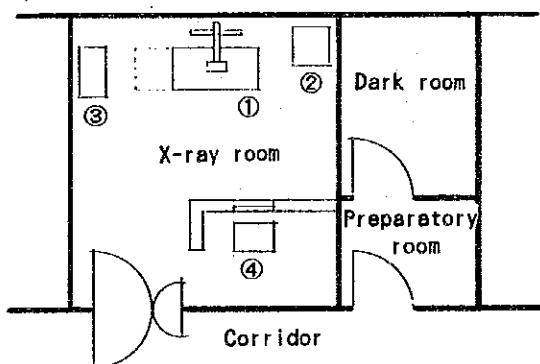
Fig. 4.3.4(6) Layout of Major Equipment in Farshut Hospital

(Operating theatre)



① Anaesthesia machine	2 units	⑤ Electro-surgery unit (medium)	2 units	⑨ Patient monitor	1 unit
② Ventilator	2 units	⑥ Electro-surgery unit (large)	2 units	⑩ Defibrillator	1 unit
③ Surgical suction apparatus	2 units	⑦ Laparoscope	1 unit	⑪ Steam autoclave	2 units
④ Operating table for general use	2 units	⑧ Operating ceiling lamp	2 units	⑫ Hot air oven (large)	1 unit

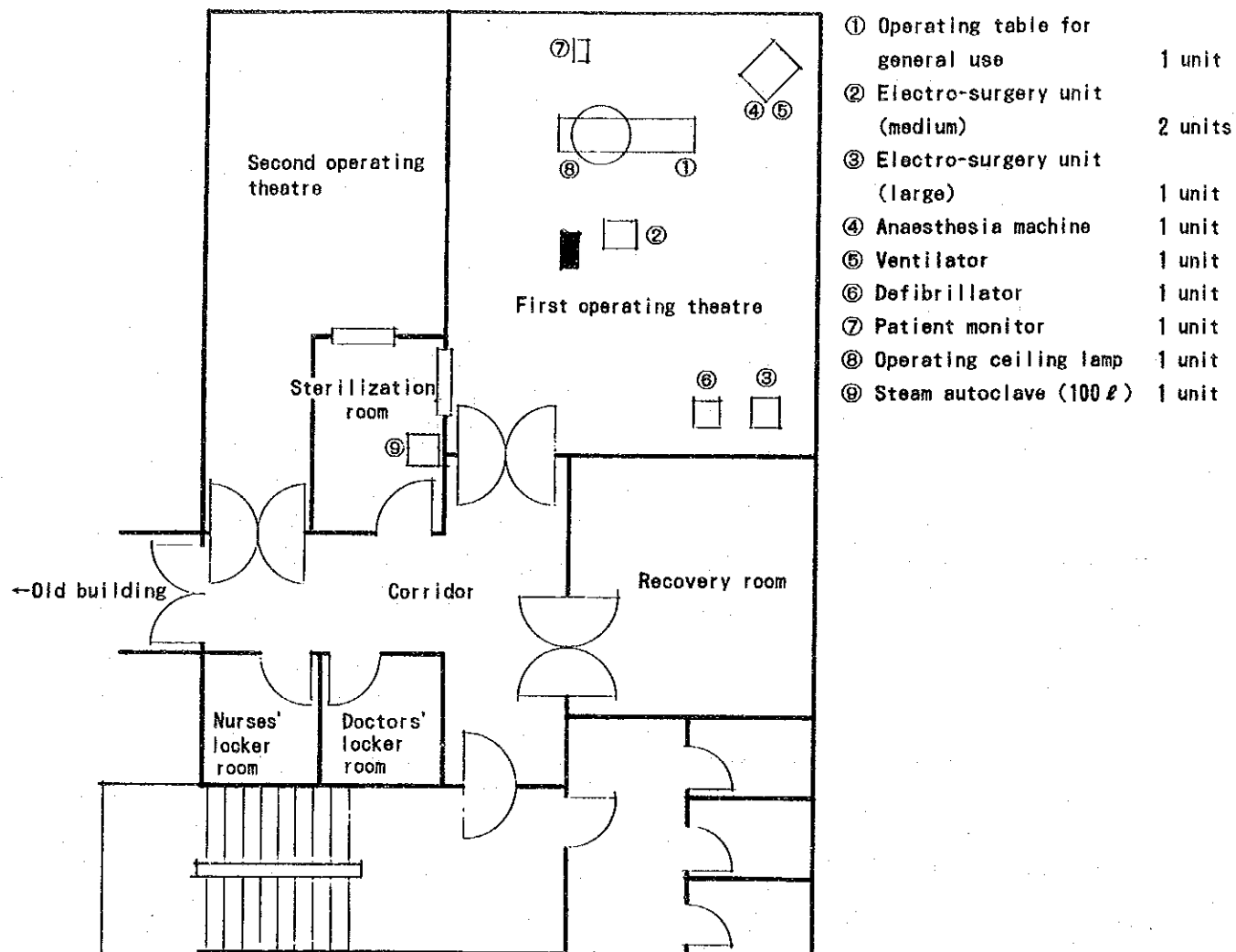
(X-ray room)



- ① Diagnostic stationary x-ray system
- ② High tension generating system
- ③ Bucky stand
- ④ Control panel

Fig. 4.3.4(7) Layout of Major Equipment in Qift Hospital

(Operating theatre)



(X-ray room)

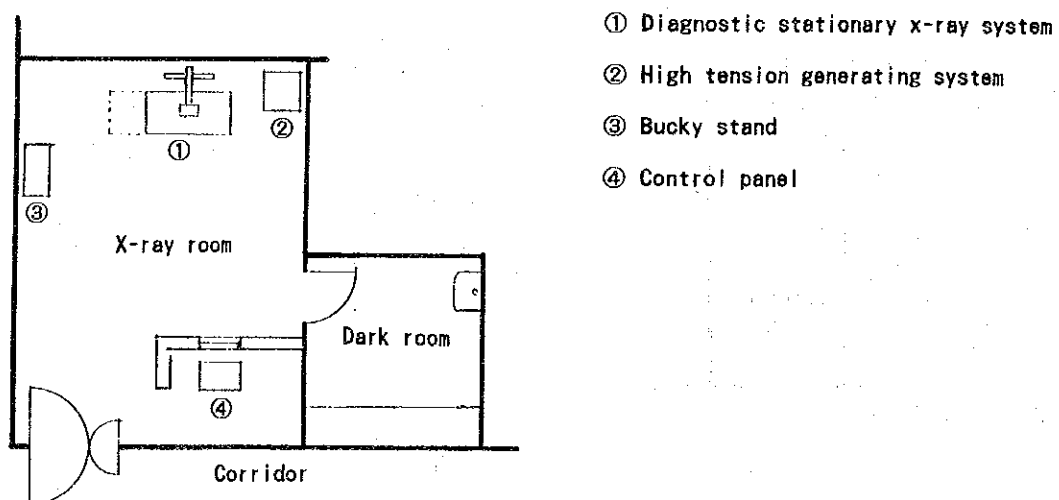
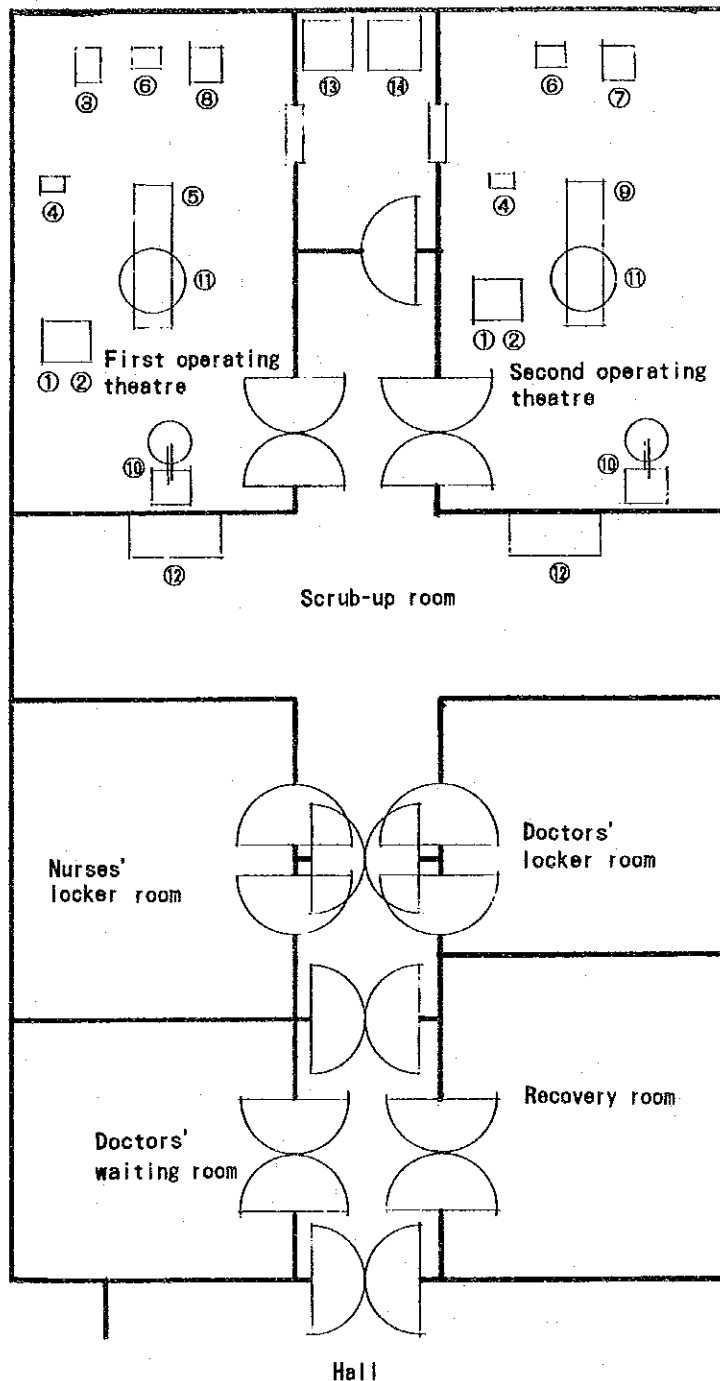


Fig. 4.3.4(8) Layout of Major Equipment in Isna Hospital (1)

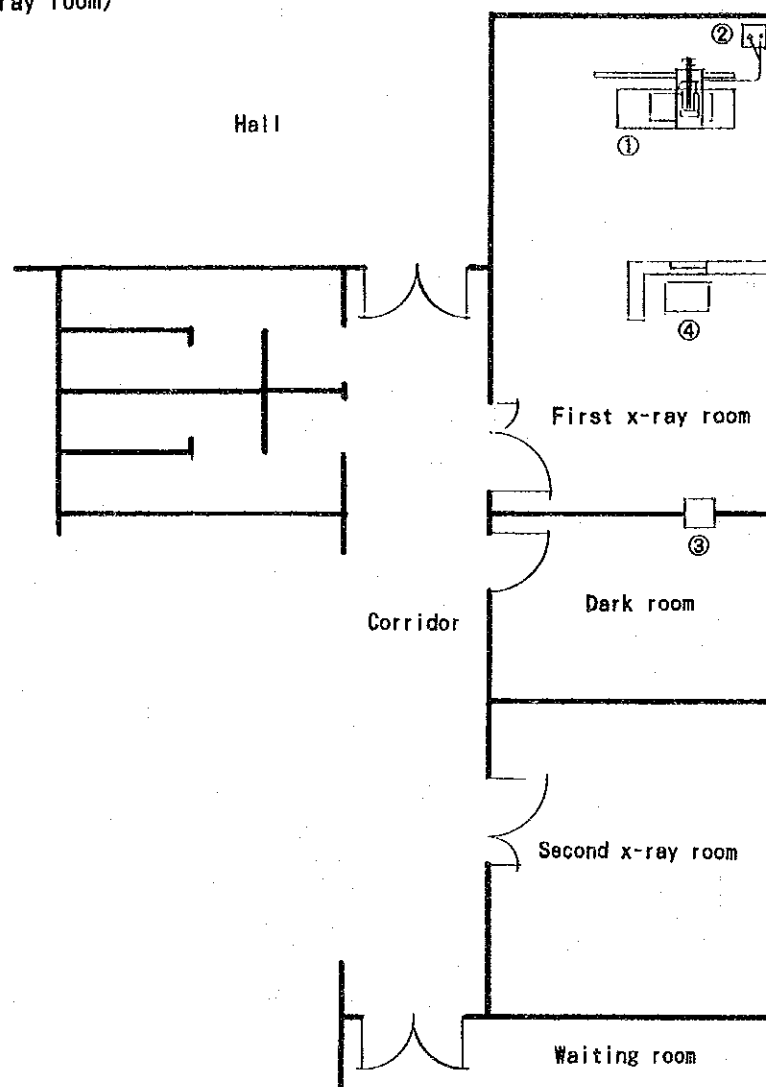
(Operating theatre)



① Anaesthesia machine	2 units
② Ventilator	2 units
③ Defibrillator	1 unit
④ Patient monitor	2 units
⑤ Operating table for general surgery	1 unit
⑥ Surgical suction apparatus	2 units
⑦ Electro-surgery unit (medium)	1 unit
⑧ Electro-surgery unit (large)	1 unit
⑨ Orthopedic operating table	1 unit
⑩ Emergency operating lamp	2 units
⑪ Operating ceiling lamp	2 units
⑫ Scrub-up unit	2 units
⑬ Steam autoclave (250 l)	1 unit
⑭ Hot air oven	1 unit

Fig. 4.3.4(9) Layout of Major Equipment in Isna Hospital (2)

(X-ray room)



- ① Diagnostic x-ray system
(with bucky table and chest stand) 1 unit
- ② High tension generating system
- ③ Cassette pass-box
- ④ Control panel

4.4 Project Implementation Programme

4.4.1 Project Implementation System

This project is carried out by the following three bodies. The implementation mechanism is shown in the following chart.

(1) Implementation Body

Implementation body of this project is the Ministry of Health of the Arab Republic of Egypt.

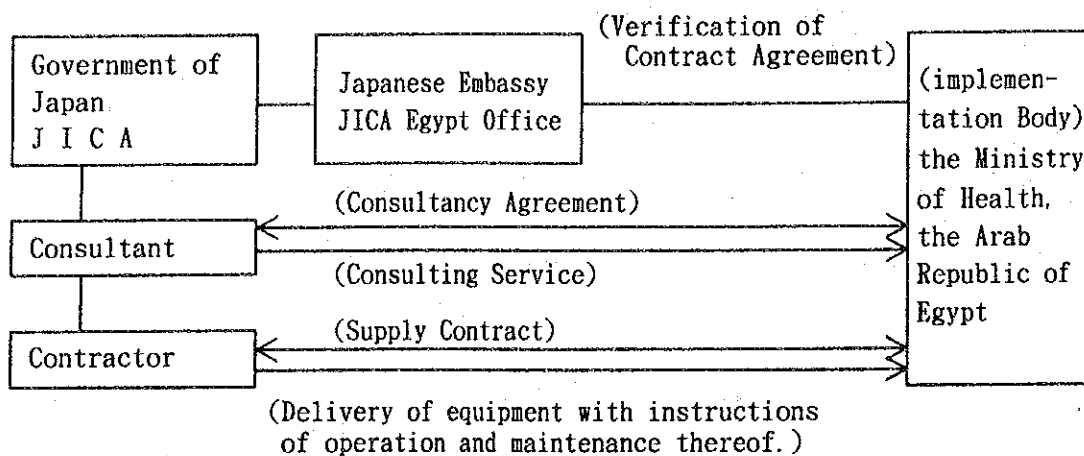
(2) Consultant

In case that this project is implemented under the Japanese Government's Grant Aid Assistance, a Japanese Consultant in conformity with a consultancy agreement to be concluded between the Implementation Body of Egypt and the Consultant will render the following consulting services:

- Detailed Design - To execute a detailed design study and to prepare specifications of equipment and other technical documents.
- Tendering - To assist the selection of a contractor and to cooperate in concluding contract.
- Procurement - To supervise procurement of the equipment and to inspect the equipment prior to shipment thereof.
- Installation - To inspect the equipment delivered to the hospital concerned and to supervise installation works thereof.

(3) Contractor

A Japanese contractor (trading firm) who has been selected by the tendering is responsible for the manufacture, delivery and installation of the equipment in conformity with a contract. The Contractor conducts guidance on the operation of the equipment and its maintenance.



4.4.2 Undertaking of Both Governments

Undertaking of the Governments of Japan and Egypt are defined as follows:

(1) Undertaking of the Government of Japan

To supply the equipment to the six proposed hospitals, install thereof and train the Egyptian personnel concerned in conformity with the procedures of the Japanese Government Grant Aid System which are summarized as follows:

- 1) The equipment to be supplied by the Government of Japan is shown in Table 4.3.1 and the proposed hospitals are indicated in 4.2.2
- 2) All the costs of sea and land transportation of the equipment to the proposed hospital sites.
- 3) Costs for installation of the equipment including dispatch of engineers, hiring Egyptian labor, tool and measuring instrument etc.
- 4) Costs for guidance on initial test, operation and maintenance of the equipment at the sites.

(2) Undertaking of the Government of Egypt

- 1) Provision of space and facilities for the installation of the equipment.
- 2) Provision of utilities such as electricity, gas, water, drainage

- etc. which are required for the installation of the equipment.
- 3) Provision of storage yard so that the equipment can be safely stored until the installation work be undertaken.
 - 4) Assurance of smooth proceedings of unloading and customs clearance in Egypt as well as prompt land transportation of the equipment to the sites.
 - 5) Exemption of Japanese nationals from customs duties, internal taxes and other fiscal levies which may be imposed in Egypt with respect to the supply of the products and services under the Japanese Grant Aid.
 - 6) Bearing of charges for the Banking Arrangement (B/A) and Authorization to Pay (A/P).
 - 7) Provision of licenses, approval and other authorizations required for the execution of the Japanese Grant Aid.
 - 8) Bearing of charges for tax exemption procedures.
 - 9) Bearing of costs other than the undertakings of Japanese and Egyptian Government which are necessary for the procurement of equipment under the Project.
 - 10) Bearing of the costs for proper and effective operation and maintenance of the equipment to be procured under the Project.
 - 11) Report of operational conditions of the equipment after the installation thereof.

4.4.3 Detail Design and Supervision

The consultant undertakes the detail design and the supervision of the project in conformity with the agreement to be concluded between the Egyptian side and the consultant.

The detail design is defined as the determination of detail design based on the Basic Design Study, and the preparation of tender documents which consists of specifications of equipment, instruction to bidders and forms of contract etc..

The supervision is to ascertain whether the work of a contractor is executed in compliance with a supply contract and to secure the adequate implementation of the contract and furthermore to render guidance, advice and coordination based on a fair standpoint.

The supervision consists of the following works.

- 1) Administrative procedures necessary for the selection of a contractor. The execution of a tender, witness of a supply contract.
- 2) Examination of the specifications of equipment and other documents to be submitted by the contractor.
- 3) Examination of the quality and performance of the equipment to be supplied.
- 4) Supervision of supply schedule of the equipment and installation thereof.
- 5) Report of the progress of the project.
- 6) Witnessing of the handing-over the equipment.

In addition to the above-mentioned work, the consultant reports the progress of the project, the payment procedures and handing-over of the equipment etc. to the Japanese Government.

4.4.4 Equipment Procurement Plan

(1) The Selection of a contractor and the Method of Selection

A Contractor to procure the equipment will be selected from Japanese trading firms by means of competitive tendering. The type of a contract will be a blanket purchasing contract specifying the kind of equipment in the contract. The contract will include manufacture, delivery, installation, initial tests of the equipment and technical guidance of operation and maintenance thereof.

(2) The procurement of Equipment

The equipment for this project will be procured from Japan or third party countries(European countries, U.S.A. etc.)

(3) Method of Transportation

Land transportation is made within Japan and sea transportation is undertaken from Japan to Alexandria Port in Egypt. From Alexandria Port, inland transportation is made to the proposed hospital sites in

Luxor City and the Qena Governorate.

4.4.5 The schedule of Implementation of the Project

(1) The Schedule of Implementation

On condition that this Project is approved by the Cabinet Meeting of the Government of Japan, and the Exchange of Notes is signed for the Project between the both Governments, the implementation works for the Project shall be undertaken with the following procedures.

- 1) Signing of the Exchange of Notes between the both Governments.
- 2) Banking Arrangement for the payment by Japan Grant Aid Fund for the Project between the Implementation Body and an authorized foreign exchange bank.
- 3) Conclusion of the consultancy agreement between the Implementation Body and the Japanese Consultant.
- 4) Verification of the consultancy agreement and the approval of payment by the Government of Japan.
- 5) Preparation of detail design and tender documents by the consultant.
- 6) Approval of tender documents by the Implementation Body and the preparation of tender by the consultant.
- 7) Execution of tendering and bids evaluation.
- 8) Conclusion of the contract for procurement of the equipment between the Implementation Body and a Japanese trading firm
- 9) Verification of the above contract and the approval of payment by the Government of Japan.
- 10) Procurement works and supervision.
- 11) Handing-over

(2) Period of Implementation

The period required for respective work after the conclusion of the exchange of Notes is as follows.

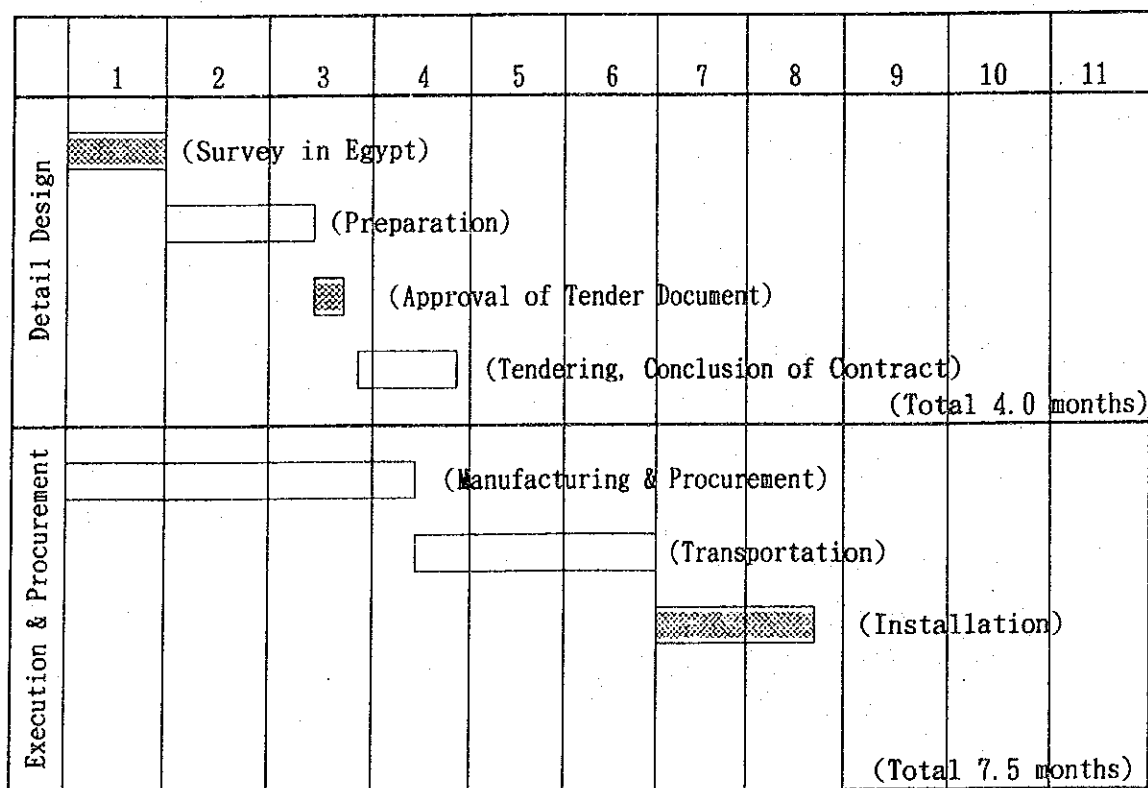
1) Conclusion of consultancy agreement and discussion of detail design	approx.	1.0 month
2) Preparation of detail design and of tender documents	"	1.5 "
3) Approval of tender documents	"	0.5 "
4) Tendering, conclusion of contract and approval	"	1.0 "
5) Manufacture of equipment	"	3.5 "
6) Transportation	"	2.5 "
7) Installation (include initial test, adjustment, operation guidance, training, maintenance instruction and confirmation of handing-over)	"	1.5 "

Total

approx. 11.5 months

Work Programme is shown in the figure 4.1.

Figure 4.1 Executing Works Schedule



Chapter 5
Effectiveness of the Project and
Conclusion

Chapter 5 Effectiveness of the Project and Conclusion

5.1 Project Evaluation

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

(1) Direct effect

Current status and problems	Solutions offered by the project	Expected result
1. Diagnosis of inpatients and out-patients is not done properly due to obsolete X-ray machines, ultrasonic units and fiberscopes or shortages thereof.	Replace or add diagnostic X-ray machines, ultrasonic units and fiberscopes.	More accurate and efficient diagnosis will become possible and the hospitals will expand their diagnostic capabilities for common disease.
2. Operating rooms and ICUs are not equipped with basic instruments such as operating tables, ceiling lamps and anesthesia machines necessary for proper treatment.	Replace or add operating tables, ceiling lamps, anesthesia machines and patient treatment.	The hospitals will be able to operate on patients and provide care more properly.
3. Sterilization is not properly done due to deteriorating sterilizing functions in theater sterilization rooms, etc.	Supply steam autoclaves and scrub-up unit.	General hygiene of the hospitals will improve, preventing hospital acquired infections etc.
4. Due to the shortage of clinical examination tools, accuracy of diagnosis is deteriorating.	Supply spectrophotometer, blood gas analyzer, flame photometer, etc. necessary for diagnosis of common diseases.	More precise patient data will be obtained, resulting in more accurate diagnosis.

(2) Indirect effect

1) Providing superior care for referred patients

The proposed hospitals which are district general hospitals, are expected to function as referral hospitals for the less-equipped smaller hospitals and clinics in neighboring towns and villages. However, due to the insufficient medical equipment, they are unable to meet their requirement. Through implementation of the project, these hospitals will become better equipped for treating such patients.

2) Correcting regional differential in health sector

The project intends to improve medical conditions in the Qena Governorate thereby upgrading the whole medical standard of Upper Egypt, lessening the regional differences.

5.2 Conclusion

Japan's Grant aid for this project is necessary and appropriate as the project is expected to produce many positive results including improvement of medical services for the residents of Luxor City and the Qena Governorate. Also, since the equipment will be installed in the existing facilities, the increased expenses borne by the Egyptian side will not be substantial. Maintenance of the procured equipment can be managed within the current financial and personnel capacities. However, to ensure the project's smooth implementation and maximum effectiveness, some measures should be taken by the parties concerned.

5.3 Recommendations

To obtain the maximum project effectiveness, the following measures are recommended to the Egyptian parties:

(1) Recommendations to Egyptian side

- 1) Minor instruments not included in the requested equipment list such as forceps, stethoscopes and sphygmomanometers should be supplied by the Egyptian side when appropriate.

2) A shortage of nurses and medical technologists at the proposed hospitals will likely become the matter of problem once these hospitals expand their operations. To mentor more medical staff to serve in Upper Egypt, more nursing institutes and medical technologist training facilities should be established.

3) As the medical staff members at Isna Hospital are not accustomed to some of the equipment to be supplied retraining of the staff is needed.

APPENDIX

APPENDIX 1(1) LIST OF MEMBERS OF SURVEY TEAM

1(1) Members of the basic design study

- | | |
|--|----------------------------|
| 1. Mr. Akira KUMAKURA | Leader |
| Senior Assistant for Grant Aid, Grant Aid Division,
Economic Cooperation Bureau, Ministry of Foreign
Affairs | |
| 2. Dr. Minoru TANABE, M.D. | Technical Adviser |
| Bureau of International Cooperation,
International Medical Center of Japan
Ministry of Health and Welfare | |
| 3. Mr. Toshiyuki NAKAMURA | Grant Aid Planner |
| First Basic Design Study Division,
Grant Aid Study & Design Department, JICA | |
| 4. Mr. Yukio CHUJO | Project Manager |
| BINKO Ltd. | |
| 5. Mr. Kenji IWASAKI | Medical Equipment Planner |
| BINKO Ltd. | |
| 6. Mr. Masayuki ASABUKI | Medical Facilities Planner |
| BINKO Ltd. | |

1(2) Members of draft final report explanation team

- | | |
|---|----------------------------|
| 1. Mr. Mitsuru SUEMORI
Director,
First Basic Design Study Division.
Grant Aid Study & Design Department, JICA | Leader |
| 2. Dr. Minoru TANABE, M.D.
Bureau of International Cooperation,
International Medical Center of Japan
Ministry of Health and Welfare | Technical Adviser |
| 3. Ms. Junko FUJIWARA
First Basic Design Study Division.
Grant Aid Study & Design Department, JICA | Coordinator |
| 4. Mr. Yukio CHUJO
BINKO Ltd. | Project Manager |
| 5. Mr. Masayuki ASABUKI
BINKO Ltd. | Medical Facilities Planner |

APPENDIX-2(1)

SURVEY SCHEDULE (Basic Design Study Team)

A: Official Group : Dec. 7th ~ 21st(15 days)

B: Consultants Group : Dec. 7th ~ 31st(25 days)

No.	Date	Movement	Activities	Accommodation
1	Dec. 7 (Tue)	Tokyo→ Frankfurt	AB:Transfer(JL407)	Frankfurt
2	8 (Wed)	Frankfurt→ Cairo	AB:Transfer(LH652)	Cairo
3	9 (Thur)	Cairo	AB:Courtesy call on JICA office, Embassy of Japan & meeting with them. Courtesy call on the Ministry of International Cooperation & the Ministry of Health and meeting with them.	Cairo
4	10 (Fri)	Cairo→ Luxor	AB:Transfer(MS435)	Luxor
5	11 (Sat)	Luxor	AB:Meeting with Mayor of Luxor City Meeting with personnel concerned of Luxor Hospital	Luxor
6	12 (Sun)	Qena	AB:Meeting with Governor of Qena Governorate Meeting with personnel concerned of Qena Hospital Interview with Ms. Sugano of Family Planning MCH Project	Nag Hammadi
7	13 (Mon)	Naga Hammadi Farshut Qift	AB:Meeting with personnel concerned of Naga Hammadi Hospital AB:Meeting with personnel concerned of Farshut Hospital Medical Equipment Planner conducted survey of the procurement from the third countries. AB:Meeting with personnel concerned of Qift Hospital	Luxor Cairo

No.	Date	Movement	Activities	Accommodation
8	14 (Tue)	Isna Luxor→Cairo	AB:Meeting with personnel concerned of Isna Hospital Medical Equipment Planner conducted survey of the procurement from the third countries. AB:Transfer(MS440)	Cairo Cairo
9	Dec. 15 (Wed)	Cairo	AB:Meeting with the Ministry of Health Medical Equipment Planner conducted survey of the procurement from the third countries.	Cairo
10	16 (Thur)	Cairo	AB:Meeting with the Ministry of Health Report to JICA office & the Embassy of Japan	Cairo
11	17 (Fri)	Cairo	AB:Arrangement of data collected. team's internal meeting	Cairo
12	18 (Sat)	Cairo	AB:Signing of the minutes	Cairo
13	19 (Sun)	Cairo → London	A:Transfer(BA154)	London
		Cairo →Luxor Qift	B:Transfer(MS431) B:Survey of Qift Hospital	Nag Hammadi
14	20 (Mon)	London → Nag Hammadi	A:Transfer(JL402) B:Survey of Nag Hammadi Hospital	In flight Nag Hammadi
15	21 (Tue)	→ Tokyo Farshut	Return to Japan Survey of Farshut Hospital	Luxor
16	22 (Wed)	Luxor	B:Survey of Luxor Hospital	Luxor
17	23 (Thu)	Qena	B:Survey of Qena Hospital	Luxor
18	24 (Fri)	Luxor	B:Arrangement of data collected	Luxor
19	25 (Sat)	Luxor Isna Luxor→Cairo	B:Survey of Luxor Hospital B:Survey of Isna Hospital B:Transfer(MS440)	Cairo

No.	Date	Movement	Activities	Accommodation
20	26 (Sun)	Cairo	B:Survey of procurement from the third countries	Cairo
21	27 (Mon)	Cairo	B:Survey of procurement from the third countries & meeting with the Ministry of Health	
22	Dec. 28 (Tue)	Cairo	B:Report to JICA office and the Embassy Japan	Cairo
23	29 (Wed)	Cairo → London	B:Transfer(BA154)	London
24	30 (Thur)	London→	B:Transfer(JL402)	In flight
25	31 →	Tokyo	B:Return to Japan	

APPENDIX-2(2)

SURVEY SCHEDULE (Draft Final Report Explanation Team)

No.	Date	Movement	Activities	Accommodation
1	Jan. 21 (Fri)	Tokyo → Frankfurt	The technical advisor and consultants were transferred to Frankfurt(LH711)	Frankfurt
2	22 (Sat)	Frankfurt → Cairo	The technical advisor and the consultants were transferred to Cairo(LH682) and joined the team leader and the coordinator who left Japan earlier. Team's internal meeting.	Cairo
3	23 (Sun)	Cairo	Meeting with JICA office and the Ministry of Health	Cairo
4	24 (Mon)	Cairo	Meeting with JICA office and the Ministry of Health	Cairo
5	25 (Tue)	Cairo	Meeting with the Ministry of Health	Cairo
6	26 (Wed)	Cairo	Meeting with JICA office and the Ministry of Health	Cairo
7	27 (Thur)	Cairo	Meeting with the Ministry of Health	
8	28 (Fri)	Cairo	Arrangement of data collected Team's internal meeting	Cairo
9	29 (Sat)	Cairo	Signing of the minutes	Cairo
10	30 (Sun)	Cairo → Paris	Transfer(AF8003)	Paris
11	31 (Mon)	Paris →	Transfer(AF276)	In flight
12	Feb. 1 (Tue)	→ Tokyo	Return to Japan	

APPENDIX 3 LIST OF PRINCIPAL PERSONS CONCERNED

1. MINISTRY OF HEALTH (MOH)

- A) DR. MOUSIRA EL SHAFIE : DIRECTOR GENERAL PLANNING DEPARTMENT
- B) DR. RAMSES MINA : CONSULTANT OF MEDICAL EQUIPMENT IN MOH
- C) DR. ADRY MUHAMMAD SAID : HEAD OF HOSPITAL ADMINISTRATION DEPARTMENT
- D) MOHAMED RASHID : ENGINEER IN M.O.H.
- E) DR. ALI FAHMG KHATER : FIRST UNDER SECRETARY OF STATE CHIEF OF
CURATIVE SECTOR MOH
- F) DR. YAHYA : GENERAL ADMINISTRATION OF PLANNING
DEPARTMENT

2. MINISTRY OF INTERNATIONAL COOPERATION (MOIC)

- A) MR. MOBSEN SADEK : DIRECTOR OF JAPAN DEPARTMENT

3. LUXOR CITY GOVERNORATE

- A) MR. AHMED FOAAD : LUXOR MAYOR
- B) DR. KHAIRY MOHAMED : DIRECTOR OF HEALTH IN LUXOR CITY

4. QENA GOVERNORATE

- A) MR. YEHIA EL BAHNASAWY : GOVERNOR OF QENA GOVERNORATE
- B) DR. EDWARD ESKANDER : DIRECTOR OF HEALTH DEPT.
- C) DR. EQBAL AZIZ : DIRECTOR OF FAMILY PLANING
- D) DR. EDWARD ISKANDER BOTROS : GENERAL DIRECTOR

5. LUXOR GENERAL HOSPITAL

- A) DR. HASHEN AHMED ABDELALY : DIRECTOR OF HOSPITAL
- B) DR. SABARY SALIB : DIRECTOR OF CHEST HOSPITAL
- B) DR. NAZIH N SELWANES : DENTIST
- C) DR. MUHAMMAD EL BOLOK : PHYSICIAN
- D) DR. SHABARY ABLY : SURGEON, PLASTIC

6. QENA GENERAL HOSPITAL

- A) DR. SAAD MALUMOND SHAMLOL: DIRECTOR GENERAL
- B) DR. SAFWAT NAGAIB : HEAD OF UROLOGY DEPARTMENT
- C) DR. AHMED EL AMIR : HEAD MASTER OF SURGERY
- D) DR. GORG AMIM : PAEDIATRICS
- E) DR. GALAL ELDIN HANAFY : GENERAL SURGERY ENDOSCOPIC
- F) DR. NABELA BARSOM : C.C.U. ROOM AND DIALYSIS
- G) DR. MOSTAFA ALTAWEL : DENTAL, OBSTETRICS AND GYNECOLOGY
- H) DR. ABED EL RAZK : UNDER SECRETARY FOR MOHIM QENA
- I) MR. MOEEN TAKAWY : DIRECTOR OF MEDICAL SUPPLY SERVICE
- J) DR. EKHLAS NASSEEF : DIRECTOR OF PHARMACEUTICAL SECTION
- K) DR. WIDAD AZIZ : PHARMACEUTICAL SECTION

7. NAG HAMMADI HOSPITAL

- A) DR. ABDEL RAZIK : UNDER SECRETARY OF QENA GOVERNORATE
- B) DR. SAMIR YAACOB : SURGERY
- C) DR. MOHAMED : SURGERY
- D) DR. LOSHDY EL SHEMIY : SURGERY
- E) DR. TALAAT : OBSTETRICS AND GYNECOLOGY
- F) DR. MOHAMED SALEH : DIRECTOR OF HOSPITAL
- G) DR. ABASS GABER : OBSTETRICS AND GYNECOLOGY
- H) DR. ABOU EL-MAGID ANAS : PHYSICIAN AND DIALYSIS
- I) DR. SAID BAKRY : DIRECTOR OF OPHTHALMOLOGY
- J) DR. SALAH SADY : ENT
- K) DR. ROMAY KAMEL : SURGERY

8. FARSHOUT HOSPITAL

- A) DR. RAMSIS DERIAS : MANAGER OF HEALTH DEPARTMENT IN FARSHOUT
- B) DR. MAHMOUD SAMI MANSOUR : DIRECTOR OF THE HOSPITAL
- C) DR. GAMAL MAMDY MOHAMED : OBSTETRICS AND GYNECOLOGY

9. ISNA HOSPITAL

- A) DR. MOHAMED ROFUUT : DIRECTOR OF HEALTH IN DISTRICT OF ISNA
- B) DR. ABED EL RAHEEM MOHAMED ELAMIR : DIRECTOR OF HOSPITAL
- C) DR. SAMIR YOUSEF : SURGERY
- D) DR. MESHEEL FOAD : DIRECTOR OF HEALTH IN ISNA
- E) MR. MAGRUBY HASSEN : DIRECTOR OF MINISTRY

10. QIFT GENERAL HOSPITAL

- A) DR. ADEL MOHAMED EL-ABBASY: DIRECTOR OF HOSPITAL
- B) DR. JOSEPH HABIB : SURGERY
- C) DR. OMAR ATEYA : PHYSICIAN
- D) DR. DEIAA ESSAWY : OTOLARYNGOLOGY
- E) DR. ABD ALMAGED : DENTAL

11. EMBASSY OF JAPAN IN EGYPT

- A) MR. TAKESHI MINAKAWA : FIRST SECRETARY
- B) MR. NAOAKI KURUMADA : ' ,
- C) MR. TOKUTARO NAKAI : ' ,
- D) KOICHI KIMURA : MINISTER
- E) NOZOMU TAKAOKA : HEAD OF THE ECONOMIC SECTION

12. JICA CAIRO OFFICE

- A) MR. TADASHI SHINOURA : RESIDENT REPRESENTATIVE
- B) MR. KAZUhide NAGASAWA : STAFF MEMBER
- C) MR. MASASHI AOYAMA : ' ,

13. JICA EXPERT

- A) DR. KATSUHIRO YOSHITAKE : TEAM LEADER, PILOT PROJECT OF FAMILY PLANNING AND MATERNAL & CHILD HEALTH
- B) MS. SUGANO : EXPERT OF THE ABOVE PROJECT

MINUTES OF DISCUSSIONS
ON
BASIC DESIGN STUDY ON THE PROJECT FOR
IMPROVEMENT OF MEDICAL SERVICES
IN
LUXOR CITY AND THE QENA GOVERNORATE
IN
THE ARAB REPUBLIC OF EGYPT

Based on the results of the Preliminary Study, the Japan International Cooperation Agency (JICA), decided to conduct a Basic Design Study on the Project for Improvement of Medical Services in Luxor City and the Qena Governorate (hereinafter referred to as "the Project").


JICA has sent to Egypt the Basic Design Study Team headed by Mr. Akira Kumakura, Senior Assistant for Grant Aid, Grant Aid Division, Economic Cooperation Bureau, Ministry of Foreign Affairs, from December 7 to 31, 1993.

The team had a series of discussions with the officials concerned of Egypt and conducted a field survey at the study area.

In the course of discussions and field survey, both parties have confirmed the main items described on the attached sheets.

The team will proceed to further works and prepare the Basic Design Study report.

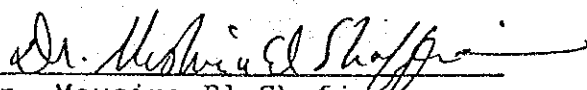
Cairo, December 18, 1993


Mr. Akira KUMAKURA

Leader

Basic Design Study Team

JICA


Dr. Mousira El Shafie

Director General

Planning Department

Ministry of Health

Witnessed by:


Mr. Mohsen Sadek

Director of Japanese Department
Ministry of International Cooperation

ATTACHMENT

1. Objective

The objective of the Project is to improve the medical services in Luxor City and the Qena Governorate.

2. Project Site

The Project sites are Luxor Hospital in Luxor City, and Qena Hospital, Naga Hammadi Hospital, Farshut Hospital, Qift Hospital and Isna Hospital in the Qena Governorate.

3. Responsible and Executing Organization

- 1) Responsible and Coordinating Organization for the Project is the Ministry of Health.
- 2) Executing Organizations of the Project are Luxor City office and the Qena Governorate Office.

4. Items requested by the Egyptian side

After discussions with the Basic Design Study Team, provision of equipment related to the Project were finally requested by the Egyptian side, as shown in Annex I.

5. Installation of the Equipment

Both parties have confirmed that the installation of the equipment shall be implemented by the Japanese side. And the Egyptian side shall bear all expenses for necessary preparatory works for the installation of the equipment.

6. Japan's Grant Aid System

- 1) The Ministry of Health has understood the system of Japan's Grant Aid as explained by the team.
- 2) The Egyptian side will take necessary measures, as described in Annex II for the smooth implementation of the Project on condition that the Grant Aid by the Government of Japan is extended to the Project.

Signature

a.

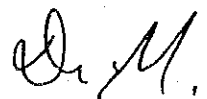
7. Schedule of the Study

- 1) The consultant team will proceed to further studies in Egypt until December 29, 1993.
- 2) JICA will complete the final report and send it to the Government of Egypt around March 1994.

8. Other relevant issues

On condition that Japan's Grant Aid is extended to the Project;

- 1) Regarding the facilities under construction in Isna Hospital, the facilities which will be completed until the end of April 1994 are included in the Project.
- 2) The Ministry of Health will assure the adequate provision of the recurring budget to the hospitals included in the Project (hereinafter referred to as "the Hospitals") for securing sustainable and proper operation and maintenance of the equipment/instruments included in the Project
- 3) The Ministry of Health will allocate the necessary personnel for the Hospitals for securing proper operation and maintenance of the Hospitals.
- 4) The Hospitals will make an inventory list on the equipment/instruments included in the project. And the list will be renewed in accordance with the condition of the equipment/instruments.
- 5) The Ministry of Health will train the personnel for proper utilization of the medical equipment in advance.



Annex I

Items Requested by the Egyptian side;

1. LUXOR HOSPITAL

02 :	Anaesthesia	
1)	Anaesthesia machine	2
2)	Ventilator	2
3)	Defibrillator	1
05:	Cardiology	
1)	ECG stress test unit	1
06:	C.C.U. (Coronary Care Unit)	
1)	Patient monitor	3
2)	Ventilator	2
3)	Infusion pump	3
4)	Continuous syringe infusion apparatus	3
5)	External demand pace maker	1
12:	Dental Surgery	
1)	Dental unit	2
2)	Dental chair	2
3)	Ultrasonic scaler	1
4)	Light cure apparatus	1
17 :	Endoscopy Unit	
1)	Colonos Fiberscope	1
2)	Fiberscope cleaning machine	1
3)	Fiberscope cabinet	1
19:	E.N.T.	
1)	Bronchoscope, rigid type, with light source	1
2)	Esophagoscope, rigid type	1
3)	Operating microscope for E.N.T.	1
4)	Audiometer	1
5)	Tympanometer	1
6)	Sound proof room	1
22:	G.Y.S.	
1)	Hysteroscope	1
32:	Histopathology lab.	
1)	Automatic tissue processor	1
2)	Freezing microtome	1
3)	Bincocular microscope	1

Sh M.

Q.

25:	Internal Medicine	
1)	E.C.G. recoder apparatus	2.
24:	I.C.U (Intensive Care Unit) Surgical	
1)	Ventilator	1
2)	Infusion pump	1
3)	Syringe infusion pump	1
28:	Medical lab.	
1)	U.V. Spectrophotometer	1
2)	Coagulometer	1
3)	Lab. incubator	2
4)	Binocular Microscope	2
5)	Water distilling apparatus	2
6)	Electric table top centrifuge	2
7)	Blood cell counter	1
8)	Hot air oven	1
9)	Steam autoclave	1
10)	Blood gas analyzer	1
11)	Flame photometer	1
44:	Obstetric	
1)	Vacuum extractor	1
2)	Portable ultrasound machine	1
3)	Faetal heart detector	2.
4)	Obstetric delivery table	1
48:	Operating theatre / Surgery	
1)	Operating table for general surgery	3
2)	Electric surgical suction apparatus	3
3)	Diathermy apparatus	3
4)	Laparoscope unit, diagnostic complete with its CO ₂ insufflator, instruments and accessories, Fiberoptic type.	1
5)	Light source with 150 watts halogen lamp	1
6)	Spare halogen lamp with 150 watt	3
46:	Ophthalmology	
1)	Operating microscope	1
2)	Diathermy for ophthalmic operation	1
3)	Ophthalmic examination unit	1
4)	Lensometer	1
47:	Orthopaedics	
1)	C-arm mobile x-ray unit	1

Dr. M.

66:	Paediatrics (Premature)	
1)	Infant intensive care system	1
2)	Infant transportable incubator	1
3)	ECG Machine (1 channel) with infant electrodes with spare infant electrodes	1
68:	Physiotherapy	
1)	Parafin wax bath	1
2)	Microwave therapy apparatus	1
3)	Computerized traction unit	1
61:	Plastic Surgery	
1)	Electric dermatome for skin grafts	1
2)	Skin mesher apparatus	1
70:	Radiodiagnosis	
1)	Portable diagnosis ultrasound machine with videoprinter and recording papers	1
2)	Automatic film processor	1
10:	Skin & Venereals	
1)	Dermojet intradermal injector	1
09:	Theatre Sterilization Room	
1)	Scrub-up unit	2
2)	Instrument washer	1
3)	Steam autoclave	1
79:	Urology	
1)	Examination/operating cysto-urethroscope with light source, spare halogen lamps	1
70/28:	Luxor Chest Hospital	
(1)	Radiodiagnosis	
1)	Stationary x-ray mass chest survey apparatus	1
2)	Xray machine	1
(2)	Medical laboratory	
1)	Lab. incubator	1
2)	Hot air oven	1
3)	Electric tabletop centrifuge	1
4)	Steam autoclave, tabletop chamber 20L, electric	1
5)	Sensitivity disc dispenser	1
6)	Colony counter	1
7)	Spectrophotometer	1
8)	Water distillizer	1

ch. 11

70/28: Luxor Fever Hospital

(1) Radiodiagnosis

- 1) Xray machine

1

(2) Medical laboratories

- 1) Incubator
2) Hot air oven
3) Electric tabletop centrifuge
4) Sensitivity disc dispenser
5) Steam autoclave
6) Electro photometer
8) Binocular microscope
9) Water distillizer

1

1

1

1

1

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1

1

Necessary spare parts for the above items:

Equal to 10% of the
equipment price

Dr. M.

2.. QENA HOSPITAL

02:	Anaesthesia	
1)	Anaesthesia machine	4
2)	Patient monitor	4
3)	Ventilator	4
34:	Blood bank	
1)	Blood bank refrigerator	2
2)	Electric tabletop centrifuge	1
05:	Cardiop;pgy	
1)	ECG stress test unit	1
06:	C.C.U. (Coronary Care Unit)	
1)	C.C. beds	3
2)	Patient monitor	3
3)	Ventilator	3
4)	Volumetric infusion pump	3
5)	Syringe infusion pump	2
17:	Endoscopy Unit	
1)	Colono Fiberscope with light source	1
19:	E.N.T.	
1)	Sinoscope	1
2)	Audiometer	1
3)	Tympanometer	1
4)	Surgical microscope for E.N.T.	1
5)	Eoesphagoscope, rigit type	1
6)	Bronchoscope, rigid type	1
8)	ENT examination / treatment unit	1
25:	Internal Medicine	
1)	E.C.G. recorder apparatus	3
24:	I.C.U. (Intensive Care Unit)	
1)	Patient monitor	4
2)	Electric surgical suction apparatus	2
3)	Infusion pump	2
5)	Syringe infusion pump	2
28:	Medical Laboratory	
1)	Electric tabletop centrifuge	2
2)	Bi-distilling water apparatus	1
3)	Spectrophotometer	1
4)	Electric steam autoclave	1
5)	Hot air oven	2
6)	lab. incubater	2
7)	Water bath	1
8)	Microscope	2
9)	Autoclave	1

Q.

Q. M.

44:	Obstetric	
1)	Portable linear ultrasound machine with videoprinter and recording papers	1
2)	Infant warmer	1
3)	Obstetric delivery table	1
4)	Vacuum extractor	1
5)	Fetal heart detector	1
48:	Operating Theatre/Surgery	
1)	Operating table for general surgery	2
2)	Orthopaedic Table	1
3)	GYN table	1
4)	Diathermy apparatus	4
5)	Electric surgical suction apparatus	4
6)	Emergency mobile operating lamp	4
7)	Operating ceiling lamps	4
8)	Surgical microscope	1
9)	Diagnostic laparoscope with standard accessories, light source and spare halogen lamps	1
47:	Orthopaedics	
1)	Orthopaedic operating table	1
2)	Pneumatic (air) drill	1
3)	Electric plaster saw	2
66:	Paediatrics (Premature)	
1)	Bilirubinometer	1
68:	Physiotherapy	
1)	Short wave therapy apparatus	1
2)	Didynamic apparatus	1
3)	Therapeutic ultrasound machine	1
4)	Interferential Therapy Unit	1
5)	Treadmill for rehabilitation	1
70:	Radiodiagnosis	
1)	Portable diagnostic ultrasound machine with videoprinter and recording papers	1
2)	Automatic film processor	1
3)	X-ray TV system	1
4)	Stationary X-ray system	1
79:	Urology	
1)	Examining/operating cysto-urethroscope with light source and spare halogen lamps	1

Necessary spare parts for the above items:

Equal to 10% of the equipment price

Dr. M.

3. NAG HAMADY HOSPITAL

02:	Anaesthesia	
1)	Anaesthesia machine	3
2)	Ventilator	3
3)	Defibrillator	1
4)	Patient monitor	3
34:	Blood Bank	
1)	Blood bank refrigerator	1
2)	Lab. incubator	1
3)	Hot air oven for sterilization	1
05:	Cardiology	
1)	ECG stress test unit	1
07:	Chest	
1)	Stationary X-ray Mass chest survey apparatus	1
2)	X-ray machine	1
12:	Dental Surgery	
1)	Dental unit	1
2)	Dental chair	1
3)	Ultrasonic scaler	1
4)	Amalganeter	1
19:	E.N.T. -	
1)	Bronchoscope, rigid type with light source and spare halogen lamps	1
2)	Audioneter	1
3)	E.N.T. unit	1
4)	Esophago scope, rigid type	1
25:	Internal Medicine	
1)	E.C.G. apparatus, recorder	1
24:	I.C.U (Intensive Care Unit) Surgical	
1)	Patient monitor	3
2)	Defibrillator	1
3)	Ventilator	2
4)	Infusion pump	3
5)	Syringe infusion pump	2
6)	Intensive care bed	3
7)	Electrocardiograph machine	1
8)	Electric surgical suction apparatus	2

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28:	Medical Lab.	
1)	Elisa photometer	1
2)	Spectrophotometer	1
3)	Binocular microscope	3
4)	Lab. incubator	1
5)	Hot air oven	1
6)	PH meter	1
7)	Coagulometer	1
8)	Blood cell counter	1
9)	Water bath	1
10)	Electric tabletop centrifuge	2
11)	Blood gas analyzer	1
12)	Flame photometer	1
44:	Obstetric	
1)	Portable linear ultrasonic with videoprinter and recording roll papers	1
2)	Infant warmer	1
3)	Faetal heart detector	1
4)	Delivery table	1
5)	Electrical vacuum extractor	1
48:	Operating theatre / Surgery	
1)	Operating table for general surgery	3
2)	Ceiling lamp	3
3)	Surgical diathermy machine	3
4)	Electric surgical suction unit	3
5)	Patient monitor	3
6)	Laparoscope diagnostic with light source and spare halogen lamps	1
46:	Ophthalmology	
1)	Ophthalmic examination unit	1
2)	Ophthalmoscope, direct	2
3)	Lensometer	1
4)	Ophthalmoscope, indirect	1
47:	Orthopaedics	
1)	Orthopaedic operating table	1
2)	Pneumatic air drill	1
3)	Electric air touniquet	2
4)	Electro plaster cutter	2

D. M.

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66:	Paediatrics (Premature)	
1)	Baby incubator	2
2)	Phototherapy apparatus	2
3)	Neonatal monitor	2
4)	Surgical suction apparatus	1
5)	Bilirubinometer	1
6)	Infusion pump	2
7)	Baby resuscitator unit	1
8)	Oxygen analyzer	1
68:	Physiotherapy	
1)	Short wave therapy apparatus	2
2)	Therapeutic ultrasonic machine	1
3)	Galvanic / Faradic stimulator	1
4)	Didynamic machine	1
5)	Interferential therapy apparatus	1
6)	Bicycle, stationary	1
7)	Treadmill	1
8)	Exerciser devices	1
70:	Radiodiagnosis	
1)	Stationary diagnosis X-ray with tilting table, bucky table and chest stand	1
2)	Portable diagnostic ultrasound with videoprinter and recording papers	1
3)	Automatic film processing machine	1
10:	Skin and Venereals	
1)	Ultraviolet lamp	1
89:	Supportive Service	
1)	Automatic electric emergency generator	1
09:	Theatre Sterilization Room	
1)	Electric steam autoclave	2
79:	Urology	
1)	Diathermy for cutting under water	1
2)	Operating/examining cystoscope rigid type with light source and spare halogen lamps	1
3)	Lithotriptoscope	1

Necessary spare parts for the above items:

Equal to 10% of the equipment price

M. H.

4. FAR THOURT HOSPITAL

02:	Anaesthesia	2
1)	Ventilator	2
2)	Electric surgical suction apparatus	2
3)	Anaesthesia machine	2
12:	Dental Surgery	
1)	Hot air sterilizing oven	1
19:	E.N.T.	
1)	Audiometer	1
2)	E.N.T. Unit	1
24:	I.C.U (Intensive Care Unit) Surgical	
1)	Patient monitor	2
2)	Defibrillator	1
3)	Ventilator	1
4)	Infusion pump	2
5)	Syringe infusion pump	1
6)	Intensive care beds	2
7)	Electric surgical suction pump	1
8)	Oxygen generator	1
37:	Laundry	
1)	Washing machine	1
2)	Extracting machine	2
28:	Medical lab.	
1)	Spectrophotometer	1
2)	Elisa photometer	1
3)	Lab. incubator	1
4)	Hot air oven	1
5)	Electric tabletop centrifuge	1
6)	Blood gas analyzer	1
7)	Flame photometer	1
44:	Obstetric	
1)	Portable linear ultrasound machine with videoprinter and recording papers	1
2)	Infant warmer	1
3)	Obstetric table	1
4)	Electric vacuum extractor	1
5)	Fetal heart detector	1

Dr. M.

48:	Operating theatre / Surgery	
1)	Operating ceiling lamp	2
2)	Operating table for general surgery	2
3)	Diathermy for general surgery	2
4)	Defibrillator	1
5)	Surgical suction pump	2
6)	Patient monitor	2
7)	Laparoscope with light source and spare halogen lamps	1
46:	Ophthalmology	
1)	Ophthalmic examination unit	1
2)	Ophthalmoscope, direct	2
3)	Lensmeter	1
66:	Paediatrics (Premature)	
1)	Baby incubator	3
2)	Neonatal monitor	3
3)	Phototherapy apparatus	3
4)	Surgical suction pump	1
5)	Bilirubinometer	1
6)	Infusion pump	2
7)	Baby resuscitator unit	1
8)	Oxygen analyzer	1
68:	Physiotherapy	
1)	Short wave therapy apparatus	2
2)	Therapeutic ultrasound machine	1
3)	Low frequency stimulator	1
4)	Parafin bath	1
70:	Radiodiagnosis	
1)	Stationary diagnostic X-ray with tilting table, bucky table and chest stand	1
2)	Portable diagnostic ultrasound machine with videoprinter and recording papers	1
89:	Supportive Service	
1)	Automatic electric emergency generator	1
09:	Theatre Sterilization Room	
1)	Steam autoclave	2
2)	Hot air sterilizing oven	1

Dr. M.

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- 79: Urology
- | | |
|--|---|
| 1) Examining cysto-urethroscope | 1 |
| 2) Operating Cysto-urethroscope with light source
and spare halogen lamps | 1 |
| 3) Diathermy for cutting under water | 1 |

Necessary spare parts for the above items: Equal to 10% of the
equipment price

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5. QIFT HOSPITAL

02:	Anaesthesia	
1)	Anaesthesia machine	2
2)	Anaesthesia ventilator	2
3)	Patient monitor	2
34:	Blood Bank	
1)	Blood bank refrigerator	1
06:	C.C.U. (Coronary Care Unit)	
1)	Patient monitor	1
2)	Defibrillator	1
3)	Ventilator	1
4)	Electric surgical suction apparatus	1
5)	Infusion pump	1
6)	Syringe infusion pump	1
7)	Intensive care bed	1
25:	Internal Medicine	
1)	E.C.G. recording apparatus portable with recording paper	1
28:	Medical Laboratory	1
1)	Water bath	1
2)	Spectrophotometer	1
3)	Electric tabletop centrifuge	2
4)	Hot air oven	2
5)	Lab. incubator	1
6)	Electric water distilling apparatus	1
7)	Binocular microscope	2
44:	Obstetric	
1)	Delivery table	1
2)	Portable linear ultrasound machine with videoprinter and recording papers	1
3)	Fetal heart detector	1
48:	Operating theatre / Surgery	
1)	Operating table for general surgery	2
2)	Shadowless operating lamp	2
3)	Diathermy apparatus for general surgery	2
4)	Surgical suction apparatus	2

Dr. M.

46:	Ophthalmology	
1)	Ophthalmic examination unit with slit lamp	1
2)	Ophthalmoscope	1
3)	Operation lamp	1
47:	Orthopaedics	
1)	Operating table for orthopaedic	1
66:	Paediatrics (Premature)	
1)	Electric ultrasonic nebulizer	1
2)	Baby incubator	1
3)	Phototherapy apparatus	1
4)	Bilirubinometer	1
5)	O ₂ analyzer	1
70:	Radiodiagnosis	
1)	Stationary x-ray machine	1
2)	Portable ultrasound machine liner/convex complete	1
89:	Supportive Service	
1)	Automatic electric emergency generator	1

Necessary spare parts for the above items: Equal to 10% of the equipment price

Dr. M.

6. ISNA HOSPITAL

02:	Anaesthesia	
1)	Anaesthesia machine	4
2)	Ventilator for anaesthesia	4
3)	Defibrillator	1
4)	Patient Monitor	2
34:	Blood Bank	
1)	Lab. incubator	1
2)	Hot air sterilizing oven	1
3)	Binocular microscope	1
06:	C.C.U. (Coronary Care Unit)	
1)	Intensive Care beds	4
2)	Patient monitor	4
3)	Ventilator	3
4)	Infusion pump	2
5)	Syringe infusion pump	2
6)	Portable, mobile X-ray	1
7)	Defibrillator	1
12:	Dental Surgery	
1)	Dental unit	1
2)	Dental patient chair	1
3)	Ultrasonic scaler	1
4)	Dental x-ray unit	1
5)	Light cure machine	1
6)	Analgizer	1
17:	Endoscopy unit	
1)	Gastroscope with light source and spare halogen lamps	1
2)	Sigmoidoscope	1
3)	Fiberscope cleaning machine	1
4)	Fiberscope cabinet	1
25:	Internal Medicine	
1)	E.C.G machine	2
2)	Electric ultrasonic nebulizer	2
24:	I.C.U (Intensive Care Unit) Surgical	
1)	Patient monitor	4
2)	Ventilator	3
3)	Automatic infusion pump	2
4)	Syringe infusion pump	2

Dr. M.

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28:	Medical Laboratory	
✓1)	Spectrophotometer	1
2)	Electric tabletop centrifuge	2
✓3)	Hot air oven	2
✓4)	Lab. incubator	1
✓5)	Electric water distilling apparatus	1
✓6)	Electric water bath	1
✓7)	Binocular microscope	2
✓8)	Hemoglobinmeter	1
✓9)	Blood gas analyzer	1
✓10)	Flame photometer for Na & K detection and estimation	1
44:	Obstetric	
1)	Operating table for obstetric/gynecology operation	2
2)	Obstetric delivery table	1
3)	Operating ceiling lamp	2
4)	Diathermy for general surgery w	2
5)	Electric surgical suction apparatus	2
6)	Emergency operating lamp	2
7)	Faetal heart detector	1
8)	Portable ultrasound linear machine with videopringer and recording papers	1
48:	Operating theatre / Surgery	
✓1)	Operating table for general surgery	1.
✓2)	Operating table for orthopaedic surgery	1
✓3)	Operating ceiling lamp	2
✓4)	Emergency operating lamp	2
✓5)	Diathermy machine	2
✓6)	Suction machine	2
46:	Ophthalmology	
1)	Ophthalmic examination unit	1
2)	Indirect ophthalmoscope	1
3)	Electric specialist ophthalmoscope	2
47:	Orthopaedics	
1)	Pneumatic air drill	1
2)	Plaster saw	2
3)	Pneumatic Tourniquet	1
66:	Paediatrics (Premature)	
✓1)	Baby incubator	3
✓2)	Baby portable incubator	1
✓3)	Phototherapy app.	2
✓4)	Bilirubinometer	1
✓5)	Baby monitor with disposable electrodes	1
✓10)	Oxygen analyzer	1

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68:	Physiotherapy	
1)	Short wave therapy apparatus	2
2)	Therapeutic ultrasound apparatus	1
3)	Diydinomic apparatus	1
70:	Radiodiagnosis	
1)	Portable ultrasound machine with videoprinter and recording papers	1
2)	Diagnostic x-ray	1
10:	Skin & Venereal	
1)	Dermajector intradermal injector	1
89:	Supportive Service	
1)	Automatic electric emergency generator	1
09:	Theatre Sterilization Room	
1)	Steam autoclave	2
2)	Hot air sterilizing oven	3
3)	Steam autoclave	1
79:	Urology	
1)	Examination/ Operating cysto-urethroscope, right type light source and spare halogen lamps	2
90:	Milk Kitchen	
1)	Hot air oven sterilizer	1
2)	Steam autoclave	1

Necessary spare parts for the above items:

Equal to 10% of the
equipment price

Dr. M.

HOSPITAL/DEPARTMENT LIST

NO.	DEPARTMENT	HOSPITAL	LUXOR	QUENA	NAG HA MMADY	FAR SHOUT	QIFT	ISNA
02	ANESTHESIA		○	○	○	○	○	○
35	BLOOD BANK			○	○		○	○
05	CARDIOLOGY		○	○	○			
06	C. C. U.		○	○			○	○
07	CHEST				○			
12	DENTAL SURGERY		○		○	○		○
17	ENDOSCOPY		○	○				○
19	E. N. T.		○	○	○	○		
22	GYNECOLOGY		○					
32	HISTOPATHOLOGY LAB.		○					
25	INTERNAL MEDICINE		○	○	○		○	○
24	I. C. U.		○	○	○	○		○
37	LAUNDRY					○		
28	MEDICAL LABORATORY		○	○	○	○	○	○
44	OBSTETRICS		○	○	○	○	○	○
48	OP. THEATER/SURGERY		○	○	○	○	○	○
46	OPHTHALMOLOGY		○		○	○	○	○
47	ORTHOPEDICS		○	○	○		○	○
66	PEDIATRICS		○	○	○	○	○	
68	PHYSIOTHERAPY		○	○	○	○		○
61	PLASTIC SURGERY		○					
70	RADIO DIAGNOSIS		○	○	○	○	○	○
10	SKIN & VENEREAL		○		○	○		○
89	SUPPORTIVE SERVICE				○	○	○	○
09bis	THEATER STERILIZATION		○		○	○		○
79	UROLOGY		○	○	○	○		○
90	MILK KITCHEN							○
70/28	LUXOR CHEST HOSPITAL		○					
70/28	LUXOR FEVER HOSPITAL		○					

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Annex II

RECOMMENDATION FOR UNDERTAKINGS BY THE GOVERNMENT OF
ARAB REPUBLIC OF EGYPT IN CASE THAT JAPAN'S GRANT AID
IS EXTENDED TO THE PROJECT:

1. To ensure prompt unloading, customs clearance of the goods for the Project at the port of disembarkation in the Arab Republic of Egypt and prompt internal transportation therein of the products purchased under the Grant Aid.
2. To secure, with respect to the supply of the products and services under the verified contract, that Japanese nationals shall not be subjected to any custom duties, internal taxes and other fisical levies which may be imposed in the Arab Republic of Egypt.
3. To accord Japanese nationals whose services may be required in connection with the supply of the products and the services under the verified contracts such facilities as may be necessary for their entry into the Arab Republic of Egypt and stay therein for the performance of their work in accordance with the relevant laws and regulations of the Arab Republic of Egypt.
4. To use and maintain properly and effectively all the equipment purchased under the Grant Aid.
5. To bear all the expenses other than those to be borne by the Grant Aid, necessary for the execution of the Project.

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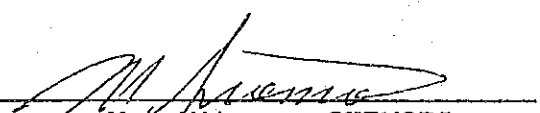
MINUTES OF DISCUSSIONS
ON
BASIC DESIGN STUDY ON THE PROJECT FOR
IMPROVEMENT OF MEDICAL SERVICES IN THE HOSPITALS
IN
LUXOR CITY AND THE QENA GOVERNORATE
IN
THE ARAB REPUBLIC OF EGYPT
(CONSULTATION ON FINAL COMPONENTS)

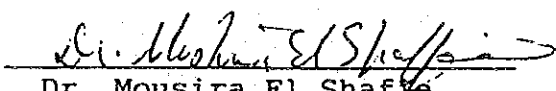
In December 1993, Japan International Cooperation Agency (JICA) dispatched Basic Design Study Team on the Project for Improvement of Medical Services in the Hospitals in Luxor City and the Qena Governorate (hereinafter referred to as "the Project") to the Arab Republic of Egypt, and through discussions, field survey, and technical examination of the results in Japan, JICA has prepared the draft components of the study.

In order to explain and to consult with the Government of the Arab Republic of Egypt on the final components of the Project, JICA sent to Egypt a study team, which is headed by Mr. Mitsuru SUEMORI, Director, First Basic Design Study Division, Grant Aid Study and Design Department, JICA, and scheduled to stay in the country from January 22 to 30, 1994.

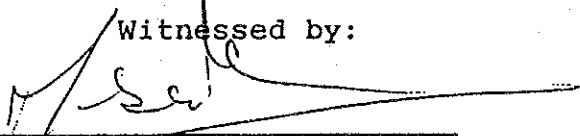
As a result of discussions, both sides finally confirmed the items described on the attached sheets.

Cairo, January 29, 1994


Mr. Mitsuru SUEMORI
Leader,
Basic Design Study
Draft Report Explanation Team,
JICA


Dr. Mousira El Shaffe
Director General,
Planning Department,
Ministry of Health,
The Arab Republic of Egypt

Witnessed by:


Mr. Mohsen M. Sadek
Director, Japan Department,
Ministry of International Cooperation,
The Arab Republic of Egypt

ATTACHMENT

1. JAPAN'S GRANT AID SYSTEM

(1) The Ministry of Health has understood the system of Japan's Grant Aid explained by the Team.

(2) The Government of the Arab Republic of Egypt will take necessary measures described in ANNEX I for the smooth implementation of the Project on condition that the Grant Aid by the Government of Japan is extended to the Project.

2. FINAL COMPONENTS OF THE PROJECT

The both sides have finally agreed the items requested by the Government of the Arab Republic of Egypt as described in ANNEX II .

3. INTERNAL TRANSPORTATION

The expenses necessary for internal transportation of the the products purchased under the Grant, will be borne by the Grant.

4. FURTHER SCHEDULE

The Team will make the Final Report in accordance with the confirmed items, and send it to the Government of the Arab Republic of Egypt around April, 1994.

5. REQUIRED ASSISTANCE FROM THE MINISTRY OF HEALTH

The Ministry of Health will take necessary measures described below for the proper and effective operation and maintenance of equipment provided under the Project.

(1) The construction of the facilities in Isna Hospital included in the Project will be completed until the end of April, 1994.

(2) The Ministry of Health will assure the adequate provision of the recurring budget to the hospitals included in the Project (hereinafter referred to as "the Hospitals").

(3) The Ministry of Health will allocate the necessary personnel for the Hospitals.

(4) The Hospitals will make an inventory list on the equipment / instruments.

(5) The Ministry of Health will train the personnel for the proper utilization of the medical equipment in advance.

ANNEX I

RECOMMENDATION FOR UNDERTAKINGS BY THE GOVERNMENT OF ARAB
REPUBLIC OF EGYPT IN CASE THAT JAPAN'S GRANT AID IS
EXTENDED TO THE PROJECT

1. To ensure prompt unloading, customs clearance at the port of disembarkation in the Arab Republic of Egypt and internal transportation therein of the products purchased under the Grant.
2. To secure, with respect to the supply of the products and services under the Verified Contracts, that Japanese nationals shall not be subjected to any customs duties, internal taxes and other fiscal levies which may be imposed in the Arab Republic of Egypt.
3. To accord Japanese nationals whose services may be required in connection with the supply of products and services under the Verified Contracts such facilities as may be necessary for their entry into the Arab Republic of Egypt and stay therein for the performance of their work in accordance with the relevant laws and regulations of the Arab Republic of Egypt.
4. To maintain and use properly and effectively the products purchased under the Grant, for the execution of the Project.
5. To bear all the expenses, other than those to be borne by the Grant, necessary for the execution of the Project.

Dr. M. S. B.

Annex II
Equipment List

I . LUXOR HOSPITAL

Anaesthesia

Anaesthesia machine	2
Ventilator	2
Defibrillator	1
Patient monitor	1

Blood bank

Electric tabletop centrifuge	1
Lab. incubator	1
Hot air oven	1
Sinocular Microscope	1

Cardiology

ECG stress test unit	1
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C.C.U. (Coronary Care Unit)

Patient monitor	2
Ventilator	2
Infusion pump	2
Syringe infusion apparatus	2
External demand pace maker	1
Electric surgical suction unit	1
Mobile x-ray unit	1

Dental

Dental unit with chair	2
Ultrasonic scaler	1
Light cure apparatus	1
Amalgameter	1
Dental mixer	1
Lab. lathe	1
Sand plaster	1
Vibrator	1
Articulator	1
Micromotor	2
Trimer	1

Endoscopy unit

Colono Fiberscope	1
Light Source	1
Fiberscope cleaning machine	1
Fiberscope cabinet	1

E.N.T.	
Bronchoscope, rigid type	1
Esophagoscope, rigid type	1
Light Source	1
Operating microscope for E.N.T.	1
Audiometer	1
Tympanometer	1
Sound proof room	1
E.N.T. examination / treatment unit	1
G.Y.N.	
Hysteroscope	1
Histopathology Lab.	
Automatic tissue processor	1
Freezing microtome	1
Binocular Microscope	1
Internal Medicine	
E.C.G. recording apparatus	2
Electric ultrasonic nebulizer	1
I.C.U (Intensive Care Unit) Surgical	
Ventilator	1
Infusion pump	1
Syringe infusion pump	1
Electric surgical suction apparatus	1
Oxygen generator	1
Medical lab.	
Spectrophotometer	1
Coagulometer	1
Lab. incubator	1
Binocular Microscope	2
Water distilling apparatus	1
Electric tabletop centrifuge	2
Blood cell counter	1
Hot air oven	1
Steam autoclave	1
Blood gas analyzer	1
Flame photometer	1
Hemoglobinmeter	1
Obstetric	
Portable ultrasound machine	1
Fetal heart detector	1
Obstetric delivery table	1
Infant warmer	1
Operating table for obstetric/gynecology	1
Operating lamp, mobile type	1

Operating theatre / Surgery	
Operating table for general surgery	2
Electric surgical suction apparatus	3
Electro-surgery unit	2
Electro-surgery unit, high power	1
Laparoscope unit	1
Ophthalmology	
Operating microscope	1
Electro-surgery unit	1
Ophthalmic examination unit	1
Lensemeter	1
Orthopaedics	
Surgical x-ray unit (C-arm)	1
Orthopaedic operating table	1
Pneumatic (air) drill	1
Electric plaster saw	2
Electric air tourniquet	1
Paediatrics (Premature)	
Bilirubinometer	1
Neonatal monitor	1
Oxygen analyzer	1
Electric ultrasonic nebulizer	1
Physiotherapy	
Paraffin wax bath	1
Microwave therapy apparatus	1
Computerized traction unit	1
Treadmill	1
Plastic Surgery	
Electric dermatome for skin grafts	1
Skin mesher apparatus	1
Radiodiagnosis	
Diagnosis ultrasound machine	1
Automatic film processor	1
Skin & Venereals	
Dermojet intradermal injector	1
Theatre Sterilization Room	
Scrub-up unit	2
Instrument washer	1
Steam autoclave	1

A. M. S. B.

Urology	
Cysto-urethroscope	1
Milk Kitchen	
Steam autoclave	1
Luxor Chest Hospital	
Radiodiagnosis	
X-ray mass chest survey apparatus	1
X-ray system	1
Medical laboratory	
Lab. incubator	1
Hot air oven	1
Electric tabletop centrifuge	1
Steam autoclave, tabletop	1
Sensitivity disc dispenser	1
Colony counter	1
Spectrophotometer	1
Water distillizer	1
Luxor Fever Hospital	
Radiodiagnosis	
X-ray machine	1
Medical laboratories	
Incubator	1
Hot air oven	1
Electric tabletop centrifuge	1
Sensitivity disc dispenser	1
Steam autoclave	1
Electro photometer	1
Binocular microscope	1
Water distillizer	1

Necessary spare parts for the above items: Approximately 10%
of the equipment
price

J. M. S. (S)

II. QENA HOSPITAL

Anaesthesia

Anaesthesia machine	3
Ventilator	3
Defibrillator	1
Patient monitor	2

Blood bank

Blood bank refrigerator	1
Electric tabletop centrifuge	1
Lab. incubator	1
Hot air oven	1
Sinocular Microscope	1

Cardiology

ECG stress test unit	1
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C.C.U. (Coronary Care Unit)

Patient monitor	2
Ventilator	2
Infusion pump	2
Syringe infusion apparatus	2
External demand pace maker	1
C.C. bed,hydorolic	2
Electric surgical suction unit	1
Mobile x-ray unit	1

Endoscopy unit

Colono Fiberscope	1
Light Source	1
Fiberscope cleaning machine	1
Fiberscope cabinet	1

E.N.T.

Bronchoscope, rigid type	1
Eoesphagoscope, rigid type	1
Light Source	1
Operating microscope for E.N.T.	1
Audiometer	1
Tympanometer	1
Sound proof room	1
E.N.T. examination / treatment unit	1

Internal Medicine

E.C.G. recoding apparatus	2
Electric ultrasonic nebulizer	1

Dr. M-S (B)

I.C.U (Intensive Care Unit) Surgical	
Infusion pump	1
Syringe infusion pump	1
Patient monitor	1
Patient monitor with ECG recording function	1
Electric surgical suction apparatus	1
Oxygen generator	1
Medical lab.	
Spectrophotometer	1
Coagulometer	1
Lab. incubator	1
Binocular Microscope	2
Water distilling apparatus	1
Electric tabletop centrifuge	2
Hot air oven	1
Steam autoclave	1
Blood gas analyzer	1
Flame photometer	1
Water bath	1
Hemoglobinmeter	1
Obstetric	
Portable ultrasound machine	1
Faetal heart detector	1
Infant warmer	1
Operating theatre / Surgery	
Operating table for general surgery	2
Electric surgical suction apparatus	4
Electro-surgery unit	2
Electro-surgery unit, high power	1
Laparoscope unit	1
Operating table for obstetric/gynecology	1
Emergency electric/battery mobile operating lamp	2
Operating ceiling lamp	3
Surgical microscope	1
Orthopaedics	
Surgical x-ray unit (C-arm)	1
Orthopaedic operating table	1
Pneumatic (air) drill	1
Electric plaster saw	2
Electric air touniquet	1

A. H. S. (B)

Paediatrics (Premature)	
Bilirubinometer	1
Neonatal monitor	1
Oxygen analyzer	1
Electric ultrasonic nebulizer	1
Physiotherapy	
Short wave therapy apparatus	1
Computerized traction unit	1
Dynamics apparatus	1
Therapeutic ultrasound machine	1
Interferential therapy unit	1
Treadmill	1
Radiodiagnosis	
Diagnosis ultrasound machine	1
Diagnostic x-ray TV system	1
Diagnostic x-ray system with bucky table	1
Automatic film processor	1
Cassette pass-box	1
Theatre Sterilization Room	
Scrub-up unit	2
Urology	
Cysto-urethroscope	1

Necessary spare parts for the above items: Approximately 10%
of the equipment
price

E. M. S. [Signature]

III . NAG HAMADY HOSPITAL

Anaesthesia

Anaesthesia machine	2
Ventilator	2
Defibrillator	1
Patient monitor	1

Blood bank

Blood bank refrigerator	1
Electric tabletop centrifuge	1
Lab. incubator	1
Hot air oven	1
Binocular Microscope	1

Chest

X-ray mass examination system	1
X-ray system with bucky table	1
Steam autoclave	1
Sensitivity disc dispenser	1
Colony counter	1
Water distillizer	1

Dental

Dental unit with chair	1
Ultrasonic scaler	1
Amalgameter	1

E.N.T.

Bronchoscope, rigid type	1
Esophagoscope, rigid type	1
Light Source	1
Audiometer	1
Tympanometer	1
Sound proof room	1
E.N.T. examination / treatment unit	1

Internal Medicine

E.C.G. recoding apparatus	1
Electric ultrasonic nebulizer	1

I.C.U (Intensive Care Unit) Surgical

Ventilator	1
Infusion pump	1
Syringe infusion pump	1
Patient monitor	1
Patient monitor with ECG recording function	1
Electric surgical suction apparatus	1
Intensive care bed, hydraulic	2
Oxygen generator	1

Medical lab.	
Spectrophotometer	1
Coagulometer	1
Lab. incubator	1
Binocular Microscope	2
Water distilling apparatus	1
Electric tabletop centrifuge	2
Blood cell counter	1
Hot air oven	1
Blood gas analyzer	1
Flame photometer	1
Water bath	1
Elisa photometer	1
Ph meter	1
Hemoglobinmeter	1
Obstetric	
Portable ultrasound machine	1
Faetal heart detector	1
Obstetric delivery table	1
Infant warmer	1
Operating theatre / Surgery	
Operating table for general surgery	2
Electric surgical suction apparatus	3
Electro-surgery unit	2
Electro-surgery unit, high power	1
Laparoscope unit	1
Operating ceiling lamp	2
Ophthalmology	
Ophthalmic examination unit	1
Ophthalmoscope, direct	1
Ophthalmoscope, indirect	1
Lensemeter	1

22.11.5. (B)

Orthopaedics	
Orthopaedic operating table	1
Pneumatic (air) drill	1
Electric plaster saw	2
Electric air tourniquet	1
Paediatrics (Premature)	
Bilirubinometer	1
Phototherapy apparatus	2
Neonatal monitor	1
Electric surgical suction apparatus	1
Volumetric infusion pump	1
Resuscitator unit	1
Oxygen analyzer	1
Electric ultrasonic nebulizer	1
Physiotherapy	
Microwave therapy apparatus	2
Computerized traction unit	1
Dynamics apparatus	1
Therapeutic ultrasound machine	1
Interferential therapy unit	1
Treadmill	1
Bicycle, stationary	1
Radiodiagnosis	
Diagnosis ultrasound machine	1
Automatic film processor	1
Diagnostic x-ray system with bucky table	1
Cassette pass-box	1
Skin & Venereal	
Ultraviolet lamp	1
Supportive Service	
Automatic electric emergency generator	1

Dr. H. S. B.

Theatre Sterilization Room

Scrub-up unit

2

Steam autoclave

2

Urology

Cysto-urethroscope

1

Necessary spare parts for the above items: Approximately 10%
of the equipment
price

AL M-S (E)

IV . FAR SHOUT HOSPITAL

Anaesthesia

Anaesthesia machine	2
Ventilator	2
Electric surgical suction apparatus	2

Blood bank

Electric tabletop centrifuge	1
Lab. incubator	1
Hot air oven	1
Binocular Microscope	1

Dental

Hot air sterilizing oven	1
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E.N.T.

E.N.T. examination / treatment unit	1
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Internal Medicine

E.C.G. recoding apparatus	1
Electric ultrasonic nebulizer	1

I.C.U. (Intensive Care Unit) Surgical

Ventilator	1
Infusion pump	1
Syringe infusion pump	1
Patient monitor	1
Patient monitor with ECG recording function	1
Electric surgical suction apparatus	1
Intensive care bed, hydraulic	2
Oxygen generator	1

At M.S. (B)

Medical lab.

Spectrophotometer	1
Lab. incubator	1
Binocular Microscope	1
Water distilling apparatus	1
Electric tabletop centrifuge	1
Hot air oven	1
Blood gas analyzer	1
Flame photometer	1
Elisa photometer	1
Hemoglobinmeter	1

Obstetric

Portable ultrasound machine	1
Faetal heart detector	1
Obstetric delivery table	1
Infant warmer	1

Operating theatre / Surgery

Operating table for general surgery	2
Electric surgical suction apparatus	2
Electro-surgery unit	2
Laparoscope unit	1
Operating ceiling lamp	2
Patient monitor	1
Defibrillator	1

Ophthalmology

Ophthalmic examination unit	1
Ophthalmoscope, direct	1
Lenseometer	1

Orthopaedics

Electric plaster saw	1
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Dr. H. S. (S)

Paediatrics (Premature)

Bilirubinometer	1
Phototherapy apparatus	2
Neonatal monitor	1
Electric surgical suction apparatus	1
Volumetric infusion pump	1
Resucitator unit	1
Oxygen analyzer	1
Electric ultrasonic nebulizer	1

Physiotherapy

Paraffin wax bath	1
Shortwave therapy apparatus	2
Dynamics apparatus	1
Therapeutic ultrasound machine	1

Radiodiagnosis

Diagnosis ultrasound machine	1
Diagnostic x-ray system with bucky table	1

Supportive Service

Automatic electric emergency generator	1
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Theatre Sterilization Room

Electric steam autoclave	2
Hot air sterilizing oven	1

Urology

Cysto-urethroscope	1
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Necessary spare parts for the above items: approximately 10%
of the equipment
price

Dr. H.S. [Signature]

V. QIFT HOSPITAL

Anaesthesia

Anaesthesia machine	1
Ventilator	1
Defibrillator	1
Patient monitor	1

Blood bank

Blood bank refrigerator	1
Electric tabletop centrifuge	1
Lab. incubator	1
Hot air oven	1
Binocular Microscope	1

C.C.U (Coronary Care Unit)

Patient monitor	1
Ventilator	1
Volumetric infusion pump	1
Syringe infusion pump	1
C.C. bed, hydorolic	1
Electric surgical suction unit	1

Internal Medicine

E.C.G. recoding apparatus	1
Electric ultrasonic nebulizer	1

Medical lab.

Spectrophotometer	1
Lab. incubator	1
Binocular Microscope	2
Water distilling apparatus	1
Electric tabletop centrifuge	1
Hot air oven	1
Water bath	1
Hemoglobinmeter	1

Dr. M.S. (F)

Obstetric	
Portable ultrasound machine	1
Fetal heart detector	1
Obstetric delivery table	1
Operating theatre / Surgery	
Operating table for general surgery	1
Electric surgical suction apparatus	2
Electro-surgery unit	1
Operating ceiling lamp	1
Ophthalmology	
Ophthalmic examination unit	1
Ophthalmoscope, direct	1
Lensemeter	1
Operation lamp for ophthalmology	1
Orthopaedics	
Electric plaster saw	1
Paediatrics (Premature)	
Bilirubinometer	1
Phototherapy apparatus	1
Oxygen analyzer	1
Electric ultrasonic nebulizer	1
Radiodiagnosis	
Diagnosis ultrasound machine	1
Diagnostic x-ray system with bucky table	1
Supportive Service	
Automatic electric emergency generator	1
Theatre Sterilization Room	
Electric steam autoclave	1
Necessary spare parts for the above items: approximately 10%	
of the equipment	
price	

A.M.S. (P)

17 .
VI . ISNA HOSPITAL

Anaesthesia

Anaesthesia machine	4
Ventilator	4
Defibrillator	1
Patient monitor	2

Blood bank

Electric tabletop centrifuge	1
Lab. incubator	1
Hot air oven	1
Binocular Microscope	1

C.C.U. (Coronary Care Unit)

Patient monitor	2
Ventilator	2
Infusion pump	2
Syringe infusion apparatus	2
C.C. bed,hydorolic	2
Electric surgical suction unit	1
Mobile x-ray unit	1

Dental

Dental unit with chair	1
Ultrasonic scaler	1
Ligh cure apparatus	1
Dental x-ray mobile unit	1
Amalgamizer	1

Endoscopy unit

Light Source	1
Fiberscope cleaning machine	1
Fiberscope cabinet	1
Gastroscope fiberoptic flexible	1
Sigmoidoscope fiberoptic flexible	1

Internal Medicine

E.C.G. recoding apparatus	2
Electric ultrasonic nebulizer	1

Handwritten signature: M. S. P.

I.C.U (Intensive Care Unit) Surgical

Ventilator	1
Infusion pump	1
Syringe infusion pump	1
Patient monitor	1
Patient monitor with ECG recording function	1
Electric surgical suction apparatus	1
Intensive care bed, hydrolitic	2
Oxygen generator	1

Medical lab.

Spectrophotometer	1
Lab. incubator	1
Binocular Microscope	2
Water distilling apparatus	1
Electric tabletop centrifuge	2
Hot air oven	2
Blood gas analyzer	1
Flame photometer	1
Water bath	1
Hemoglobinmeter	1

Obstetric

Portable ultrasound machine	1
Faetal heart detector	1
Obstetric delivery table	1
Infant warmer	1
Operating table for obstetric/gynecology	2
Operating ceiling lamp	2
Electro-surgery unit	2
Electric surgical suction apparatus	2
Emergency operating lamp	2

D. M. S.

Operating theatre / Surgery

Operating table for general surgery	2
Electric surgical suction apparatus	2
Electro-surgery unit	1
Electro-surgery unit, high power	1
Orthopaedic operation table	1
Operating table for obstetric/gynecology	1
Emergency electric/battery mobile operating lamp	2
Operating ceiling lamp	2

Ophthalmology

Ophthalmic examination unit	1
Ophthalmoscope, direct	1
Ophthalmoscope, indirect	1
Lensometer	1
Operation lamp for ophthalmology	1

Orthopaedics

Pneumatic (air) drill	1
Electric plaster saw	1
Electric air tourniquet	1

Paediatrics (Premature)

Bilirubinometer	1
Phototherapy apparatus	2
Neonatal monitor	1
Resuscitator unit	1
Oxygen analyzer	1
Electric ultrasonic nebulizer	1

Physiotherapy

Short wave therapy apparatus	2
Dynamics apparatus	1
Therapeutic ultrasound machine	1

Radiodiagnosis

Diagnosis ultrasound machine	1
Diagnostic x-ray system with tilting table	1
Cassette pass-box	1

W. M. S. (B)

Skin and Venereal

Dermojet intradermal injector 1

Supportive Service

Automatic electric emergency generator 1

Theatre Sterilization Room

Scrub-up unit 2

Steam autoclave 2

Electric steam autoclave 1

Hot air sterilizing oven 2

Urology

Cysto-urethroscope 1

Milk Kitchen

Hot air oven sterilizer 1

Steam autoclave 1

Necessary spare parts for the above items: Approximately 10%
of the equipment
price

Dr. H. S. [Signature]

APPENDIX 5 Table of the Conditions of Major Existing Equipment

A: functions normally
 B: functions, but need to be repaired
 C: functioning at present but have to be replaced
 D: no functioning, and can not be repaired
 UK: unknown

1. Luxor Hospital

Name of Equipment	Qty	Country of Manufacture	Conditions of Equipment
Diagnostic X-ray system	1	Netherlands	A; Installed in '89, can be used even today. Two tube systems and composed of X-ray TV system with tilting table and bucky table
Ultrasound machine	1	Denmark	A; sector scanning system 3.5KHz
Operating table	3	U. K., China, etc	B; old, superannuated
Operating ceiling lamp	3	Poland	B; Installed 5 years ago, two of them are older. Each one has unlit lamp.
Anaesthesia machine	3	U. K., Germany	A/C; 5~10 years old, 2 units should be replaced
Ventilator	3	U. K., Germany	same as the above
Diathermy	1	Germany	2 years old
Delivery table	1	—	B; need to be repaired
E. C. G. recorder	1	U. K.	A; be using for 5 years
Spectrophotometer	1	U. S. A.	A; be using for 10 years
Spectrophotometer	1	Italy	B; 15 years old, not frequently be used
Colorimeter	1	PARCO SBH	A; be using for 10 years
Microtome	1	Japan	A; prompt, is said to be accurate
Micortome	1	Italy	A; passed 1 year since installation
Microtome Knife			
Sharpener	1	U. S. A.	A; passed 1 year since installation
Diagnostic X-ray system	1	Germany	C; Installed in 1979, large focus can be used, small focus is not functionable.
Dental X-ray apparatus	1	Czechslovakia	C; Manufactured in 1969, picture is not clear, necessary to be repaired.
Dental X-ray apparatus	1	Czechslovakia	C; Unknown, not functionable.
Dental unit	2		C; low functionability
X-ray therapy system	1	Germany	C; 1979, out of order
Shortwaves apparatus	1	Germany	A; 12MHz, 400W, installed in 1979. 4 pieces of 2 kinds of probes, 2 pieces of probes can be used simultaneously.

Name of Equipment	Qty	Country of Manufacture	Conditions of Equipment
Shortwaves apparatus	1		A; 11.27.12MHz
Ultrasonic Therapy apparatus	1		A
Ultra-violet,	1		A; 1150W
Infra-red therapy			
Rehabilitation apparatus	1		B-C; Using ladder and wheel, give motive training for hand and finger. Although old equipment, this is functioning.
Microscope	1	Germany	B
Microscope	1	Czechslovakia	B
Calorimeter	1	Japan	A
Frame photometer	1	Denmark	A; made by Radiometer, FLM3
X-ray mirror camera system	1	Netherlands	C; using for more than 20 years
X-ray machine	1	own-made	C; Fixed X-ray tube type, far beyond the appropriate time for the replacement.

2. Qena Hospital

Name of Equipment	Qty	Country of Manufacture	Conditions of Equipment
Fiberscope	1	Japan	A; Asahi Optical made, installed 10 months ago
Refrigerator	1	Egypt	C; 200%, broken, installed more than 20 years ago
Blood bank freezer	1	U.S.A.	A; can take 40 bags
Blood bank freezer	1	U.S.A.	C; can take 40 bags, not functioning
Patient monitor	1		A; using for 5 years
Patient monitor	5		C
Electrocardiograph	1	Japan	C
Defibrillator	2		A; using 5 years
Baby incubator	4		A; portable, using for 1 year
Baby incubator	3	U.S.A.	A; using for 6 months
Infra-red, Ultra-violet therapy	1		B; functioning although very old
Parafin wax bath	1		B; functioning since 1970
Shortwaves therapy apparatus	1	Germany	B; very old, functioning for more than 25 years
Rehabilitation equipment	1		B; 8 kinds
Diagnostic X-ray machine	2	Hungary	C; older than 20 years. Table is designed to move back and forth, but out of order now. Fluorescent plate can not be used. Now being used for chest.

Name of Equipment	Qty	Country of Manufacture	Conditions of Equipment
Dental diagnostic X-ray machine	1	France	B; installed 3 years ago
Portable diagnostic X-ray	1		C
X-ray therapy system	1		C; out of order, 250kV MAX.
Water distiller	1		A; Capacity: 1m ³
Hemodialysis	2	U. S. A.	A; installed in 1987
Hemodialysis	3	U. S. A.	A; procured by financial assistance in 1988
Hemodialysis	3	U. S. A.	A; procured by the assistance of USAID in 1993
Gynecological operating table	2		B; old
Operating ceiling lamp	1		D; Incandescent lamp is used as substitute.
Anaesthesia machine	1		C
Operating table	1		A; installed 3 months ago
Anaesthesia machine	1	U. K.	A; installed 2 years ago
Defibrillator	1	U. K.	D
Electrocardiograph	1		D
Diathermy	1		B
Operating ceiling lamp	1		C; without lamp
Operating table	1	China	A
Anaesthesia machine	1	U. K.	B
Infra-red, Ultra-violet therapy	1		B; old
Parafin wax bath	1		B; old
Shortwaves therapy apparatus	2		B; old
Rehabilitation equipment	1		B; 8 kinds, old
Centrifuge	3	U. K.	B; various kinds, old
Spectrophotometer	1		B; installed 8 years ago
[Maintenance equipment]			
Digital volt. amp.	1		A; small size, portable type
Oscilloscope	1	U. K.	A; installed by MOH 5 years ago
Analog volt. amp. meter	1		B; old
Diathermy tester	1		A; installed 2 months ago
Universal bridge	1		A; high quality
Megger	1	U. K.	B

3. Nag Hammadi Hospital

Name of Equipment	Qty	Country of Manufacture	Conditions of Equipment
Transistor tester	1		A; small size
Direct electric current source	1		A; 2 outlets type
Tool kit	1		B
Heat gun kit	1		A
Cysto-urethroscope(3 kinds)	1	U.K.	A; procured 4 years ago, can be used satisfactorily
Light source for the above	1		D; broken, can not be used
Baby incubator portable type	4	U.S.A.	A; less than 2 years since the procurement
Oxygen enricher	2	U.S.A.	A; accessory for the above
Ultraviolet lamp	1		A; installed 1.5 years ago
Delivery table	1		A; old, but can be used
Gynecological operating table	1		B; old, but can be used
Ultrasonic diagnosis system	1	Japan	A; installed in 1993
Hemodialysis apparatus	4	U.S.A.	A; Respectively two units were installed in '89 and '90, functioning.
Water distiller	1	U.S.A.	A; functioning
X-ray mirror camera system	1	Netherlands	C; installed in 1972, almost no functioning
X-ray unit with bucky stand	1		B; Manufactured in 1959, almost no functioning
Film viewer (for roll film)	1		B; with magnifier, can be used somehow
Film viewer (for film)	1	Egypt	C; Type of single incandescent lamp, low performance
Operating ceiling lamp	1		C; installed 10 years ago. Superannuated, dangerous
Operating ceiling lamp	1		B; installed in 1959. Half of bulbs do not light.
Anesthesia machine	1	U.K.	B
Surgery instrument	1		B; short in quantity
Shortwaves therapy apparatus	1		A; installed 15 years ago
Diathermy	1		A; installed in 1980
Ultrasonic therapy apparatus	1	U.S.A.	B; mal-contact of probe, being used with repair
Infra-red, Ultra-violet therapy	1	Polland	B; being used for 4 years
Infra-red, Ultra-violet therapy	1	U.K.	B; Being used for 5 ~ 6 years. Infra-red working, Ultra-violet not working properly.
Stimulator	1	U.S.A.	B; Broken probe has been repaired.
Parafin wax bath	1	Germany	A; The size of the bath can take only the hand of human, too small to use.

Name of Equipment	Qty	Country of Manufacture	Conditions of Equipment
Rehabilitation equipment	1		B-C; Using ladder and wheel, give motive training for hand and finger. In spite of old equipment, this is functioning.
Dental chair	1	China	C; being used for more than 10 years
Dental treatment unit	1	China	C; being used for more than 10 years
Microscope	3	Japan, others	B; The lamp does not light.
Microscope	3	Japan, others	A
Centrifuge	2	Germany	A; installed 2 and 4 years ago
Blood bank freezer	1	Egypt	B; Revolving sound of motor is noisy, but working.
Diagnostic X-ray system	1	Netherlands	B; Philip made. Tilting table does not work, therefore used as stationary table.
Dental X-ray apparatus	1	Czechoslovakia	B; The apparatus of 20 years ago. Cone is broken.
Operating ceiling lamp	2		B; more than 10 years old. Being used with occasional repair.
Operating table	1	China	A; being used for 5 years
Operating table	2	China	B; is not functionable well
Anaesthesia machine	2	U.K.	A; installed 4 and 15 years ago
Electrosurgical unit	1	U.K.	B; The wire of electrode is old, but serviceable.

4. Farshut Hospital

Name of Equipment	Qty	Country of Manufacture	Conditions of Equipment
Hemodialysis	1	Germany	A; installed 6 months ago by MOH, functions well
"	1	U. S. A.	A; installed 1.5 years ago
"	1	U. S. A.	A; installed 3 years ago by USAID
Water distiller	1	U. S. A.	A; installed by USAID
Operating table	2	China	B; installed 13 years ago
Operating ceiling lamp	1	Italy	B; installed 4 years ago
"	1	China	C; Has been used for 15 years, one out of five lamps is out, glass is broken
Mobile operating lamp	1		A; 4 lamps type, installed 4 years ago
X-ray unit	1		A; installed 20 years ago
"	1	France	A; mobile type
Dental X-ray apparatus	1	Italy	A; being used for 2 years

Name of Equipment	Qty	Country of Manufacture	Conditions of Equipment
X-ray unit	1	Hungary	C; installed 15 years ago
Anaesthesia machine	2	U. K.	B
Dental lab. instrument(4 kinds)	1		B; Superannuated
Suction pump	1		C;
Electrocardiograph	1		C;
Dental unit	1	Czechoslovakia	B; being used for more than 7 years. with motor, lamp and fan
"	2	China	C; motor working, without lamp scaler working, superannuated
Cysto-urethroscope	3	U. K.	C; three scopes, one light source, procured more than 15 years ago. no serviceable now
Colonofiberscope	1		C; can not be used due to superannuation
Freezer for Blood Bank	1		A; 22ℓ, installed 2 months ago by MOH
Colorimeter	1	Japan	A; installed 2 years ago by MOH

5. Gift Hospital

Name of Equipment	Qty	Country of Manufacture	Conditions of Equipment
ECG(portable)	1	Japan	A; small type, one channel
Diagnostic X-ray system	1	Hungary	B; 135KV, remarkably superannuated
"	1	Hungary	B; 125KV, 400mA, FOCAL SPOT 1mm, superannuated
Operating ceiling lamp	1	—	B; without front glass for two lamps
Suction unit	1	France	B; functioning
Anaesthesia machine	1	U. K.	B; functioning
Balance	1	China	B; 200g MAX, covered by glass case
Refrigerator	1	—	B; medium size, functioning
Centrifuge	1	—	B;
Blood analyzer	1	—	B; small tool for blood test
Blood cell analyzer	1	—	B; small tool for blood test
Microscope	1	—	
Lab. incubator	1	—	
Dental unit	1	—	B; one hand piece, without accessories except one examining lamp, functioning
Dental X-ray apparatus(mobile type)	1	Italy	B; installed 1.5 years ago, functioning
Operating table	1		B; same as the above

6. Isna Hospital

Name of Equipment	Qty	Country of Manufacture	Conditions of Equipment
Diagnostic X-ray system	1	Netherlands	B; Electric current control is out of order, superannuated
"	1	Hungary	B; tilting table does not work, superannuated
Gynecological table	1		B; mechanism does not work well
Operating table	1		B; "
Operating ceiling lamp	1		C; incandescent lamp is used as substitute
Sterilizer	1		C; superannuated
Centrifuge	1		C; "
Anaesthesia machine	1		C; "
Microscope	1		C

APPENDIX 6

Table of Major Sales Agents of Medical Equipment

	Name of Agent	Commodity	Manufacturer(Country)
1	Trading Medical Systems Egypt	CT Scanner X-Ray Apparatus Ultrasound Apparatus MRI	TOSHIBA CORP. (Japan) TOSHIBA CORP. (Japan) TOSHIBA CORP. (Japan) TOSHIBA CORP. (Japan)
2	Medical Concrete	Endoscope Surgical Microscope	Olympus (Japan) Olympus (Japan)
3	Egyptian Engineering and Industrial Office	Infant Equipment Radiology Equipment Intensive Care Equipment Anaesthesia Machine Operating Table Beds & Medical Cabinets Hospital Kitchen & Laundry	Atom (Japan) Shimadzu (Japan) Cardiac Recorder (UK) Penlon (UK) Blanco (Germany) Arnolds (Germany) Zanusi (Italy)
4	Chemilab Scientific Services	Laboratory Equipment Laboratory Equipment Medical Furniture Patient Transfer Equipment E. M. G. /E. E. G. I. C. U. Equipment C. C. U. Equipment Blood Gas Analyzer	CIBA Corning Cyva (USA) Nesbit Evans (UK) Nesbit Evans (UK) Dantec (Denmark) Hamilton (Switzerland) Ameda (Switzerland) Radiometer (Denmark)
5	Medical Scientific Union	Ultrasound Equipment I. C. U. Equipment Ventilator Physiotherapy	Aloka (Japan) Heliga (Germany) Drager (Germany) EMS (UK)
6	Arab Co. for Advanced Supplies	I. C. U. Equipment Dental Equipment Operating Table Operating Lamp Sterilizer Autoclaves	Diagnostic Medical Systems (USA) Victor Co. (Taiwan) Eastern Medical (Taiwan) Eastern Medical (Taiwan) Eastern Medical (Taiwan) Eastern Medical (Taiwan)

	N a m e o f A g e n t	C o m m o d i t y	Manufacturer(Country)
7	Cleopatra Pharma Co.	Dental Equipment X-Ray Equipment Electrocardiograph Radiology Equipment Physiotherapy Equipment	Sherona (Czechoslovakia) Medicon (Hungary) Medicon (Hungary) Medimor (USA) Universal (Canada)
8	Alkan Co., Ltd.	Laboratory Equipment & Kits Laboratory Equipment Catheters Coils and Hollow Fiber	Bio-Merieux (France) Ames (USA) B. Brown (USA) Baxter (USA)
9	Amin Trade Office	Laundry Equipment Laundry Equipment Kitchen Equipment Boiler Disinfection Unit	Bowe (Germany) Milner (USA) MKN (Germany) Bay (Germany) Miele (Germany)
10	BM-Egypt	Endoscopes Surgical Instruments Catheters Hollow Fiber & Coil Radiology Equipment Auto-Analyzer Surgical Suture	Solos (USA) Solos (USA) Nissho Co. (Japan) Nissho Co. (Japan) Hitachi (Japan) BM (Germany) Aticon (UK)
11	Medequip	Sterilization Equipment Physiotherapy Equipment Medical Gasses I.C.U. Equipment Mass Chest Operating Lamps Surgical Instruments Beds EMG/EEG Lithotripter	Subtil Grepieux (France) Enraf Nounis (Holland) Nasseti (Italy) Heulette Packard (USA) Oldelft (Holland) Angenieux (France) Martin (Germany) Hillrom le Couviour(Frc) Alvar-Racia (France) Dornier (Germany)
12	New Technology	Radiology Equipment	General Electric (USA)

	N a m e o f A g e n t	C o m m o d i t y	Manufacturer(Country)
13	Middle East International Trading Co.	Dental Equipment Dental Equipment Dental Materials Endoscopes Dental Materials Dental Materials	Yoshida (Japan) Dental-EZ (USA) G. C. (Japan) Machida (Japan) Vita (Germany) Pego (Germany)
14	Negm Co.	Medical Gasses Anaesthesia Equipment Suction Unit Operating Tables Operating Lamps I. C. U. Equipment Treadmill/Holter Surgical Instrument Medical Furniture	Ohmeda (UK) Ohmeda (UK) Ohmeda (UK) Ohmeda (UK) Ohmeda (UK) Marquette Electric (USA) Marquette Electric (USA) Holborn (UK) Dohrty Elisson (UK)
15	Egyptian Office for Scientific & Medical Equipment	Dental Equipment Dental Instrument Dental Materials	Olympia (Japan) Olympia (Japan) Olympia (Japan)

SUPPLEMENT

Supplement (1)

Members of the preliminary survey team

- | | |
|--|------------------------------|
| 1. Dr. Minoru TANABE
Department of International Cooperation,
National Medical Center Hospital,
Ministry of Health and Welfare | Leader |
| 2. Dr. Shuzo KANAGAWA
Department of International Cooperation,
National Medical Center Hospital,
Ministry of Health and Welfare | Hospital Planner |
| 3. Ms. Noriko SUZUKI
Grant Aid Study & Design Department, JICA | Grant Aid Planner |
| 4. Mr. Isamu NYUI
Technical Adviser, Japan International
Cooperation System | Medical Equipment
Planner |
| 5. Mr. Kimio SUZUKI
Technical Adviser, Japan International
Cooperation System | Medical Equipment
Planner |

SUPPLEMENT (2)

MINUTES OF DISCUSSIONS
ON
THE PRELIMINARY STUDY ON THE PROJECT FOR
IMPROVEMENT OF MEDICAL SERVICES IN THE HOSPITALS
IN
LUXOR CITY AND THE QENA GOVERNORATE
IN
THE ARAB REPUBLIC OF EGYPT

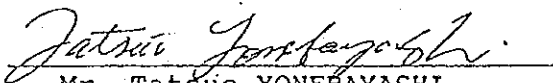
In response to the request from the Government of the Arab Republic of Egypt, the Government of Japan decided to conduct a Preliminary Study on the Project for Improvement of Medical Services in the Hospitals in Luxor City and the Qena Governorate (hereinafter referred to as "the Project") and entrusted the study to the Japan International Cooperation Agency (JICA).

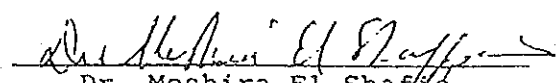
JICA has sent to Egypt the Preliminary Study Team headed by Dr. Minoru Tanabe, M.D., Ph.D., Department of International Cooperation, National Medical Center Hospital, Ministry of Health and Welfare, from July 3 to 20, 1993.

The team had a series of discussions with the officials concerned of Egypt and conducted a field survey at the study area.

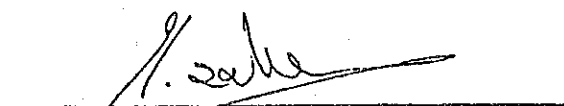
As a result of discussions and field survey, both sides have agreed to recommend to their respective governments the main items described in the attached sheets.

Cairo, October 25, 1993


Mr. Tatsuo YONEBAYASHI
Deputy Resident Representative
JICA Egypt Office


Dr. Moshira El-Shafie
Director General of Planning
Ministry of Health

Witnessed by:


Mr. Mohsen Sadek
Director of Japan Department
Ministry of International Cooperation

ATTACHMENT

1. Objective

The objective of the Project is to improve the medical services in the hospitals in Luxor City and the Qena Governorate as is described on the item 2. below.

2. Project Site

The Project sites are Luxor Hospital in Luxor City, and Qena Hospital, Naga Hammadi Hospital, Farshut Hospital, Qift Hospital and Isna Hospital in the Qena Governorate.

3. Responsible and Executing Organization

- 1) Responsible and Coordinating Organization for the Project is the Ministry of Health.
- 2) Executing Organizations of the Project are Luxor City Office and the Qena Governorate Office.

4. Items requested by the Egyptian side

Equipment/instruments plus 10% of the grand value as spare parts which are necessary for primary medical care in Qift, Isna, Farshut and Naga Hammadi Hospitals and for secondary medical care in Luxor and Qena Hospitals were finally requested by the Ministry of Health. The Ministry also requested to be entitled to prepare the specifications of the requested items in collaboration with Japanese side and emphasized its capability in this respect.

Dr. Mohamed El Shaffey

5. Comments by the Japanese side on the items in 4. above

1) The Japanese side will analyze the requested items based on the following criteria :

a) Equipment/instruments which are in urgent necessity.

b) Equipment/instruments which can be utilized and maintained under the improved operational capability of the hospitals as far as the sufficient data and future plan of the hospitals are submitted at the time of Basic Design Study.

c) Equipment/instruments which can benefit to as many people as possible.

d) Equipment/instruments which will be basically utilized for essential clinical care.

2) Spare parts of equipment/instruments will be provided according to the budgetary allocation.

3) As for preparing the specifications it is agreed to be prepared by both sides.

6. Japan's Grant Aid system

1) The Ministry of Health has acknowledged the system of Japan's Grant Aid as explained by the team.

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

7. The Scope of cooperation

If the Project is found feasible as a result of the Preliminary Study, JICA will send the Basic Design Study Team around November 1993. The scope of cooperation covered by the scheme of Japan's Grant Aid will be studied and clarified by the above-mentioned Basic Design Study Team.

Dr. Mohamed El Shiekh

8. Basic Design Study

The scope of works of the Basic Design Study will include;

- 1) Technical survey,
- 2) Preparation of basic design of equipment.
- 3) Preparation of the implementation plan.
- 4) Cost estimation of the Project in foreign and local currencies.
- 5) Evaluation of the Project.

9. Other relevant issues

- 1) The Ministry of Health will submit the available answers to the questionnaires requested by the team. After receiving the said answers, the Japanese side will proceed to analyze in Japan.
- 2) The Ministry of Health agrees to the following issues presented by the Japanese side and will take necessary measures in that connection.
 - a) The Japanese side emphasized that the number of nurses in each hospital is recommended to be increased in order to improve medical services in Luxor City and the Qena Governorate.
- 3) On condition that Japan's Grant Aid is extended to the Project;
 - a) If electricity and water in the facilities currently under construction have been installed at the time of Basic Design Study, the Grant of the equipment for the facilities will be considered.

Dr. M. Sh. El Shafie

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- b) The Ministry of Health will assure the adequate provision of the recurring budget to the hospitals included in the Project (hereinafter referred to as "the Hospitals") for securing sustainable and proper operation and maintenance of the equipment/instruments included in the Project.
- c) The Ministry of Health will allocate the necessary personnel for the Hospitals for securing proper operation and maintenance of the Hospitals.
- d) The Hospitals will make an inventory list on the equipment/instruments included in the Project. And the list will be renewed in accordance with the condition of the equipment/instruments.

Dr. Mehdi El Shafie

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Annex

Recommendation for Undertakings by the Government of the Arab Republic of Egypt on condition that Japan's Grant Aid is extended;

1. To ensure prompt unloading, customs clearance of the goods for the Project at the port of disembarkation in the Arab Republic Egypt.
2. To secure, with respect to the supply of the products and services under the verified contracts, that Japanese nationals shall not be subject to any customs duties, internal taxes and other fiscal levies which may be imposed in the Arab Republic of Egypt.
3. To accord Japanese nationals whose services may be required in connection with the supply of products and the services under the verified contracts such facilities as may be necessary for their entry into Egypt and stay therein for the performance of their work in accordance with the relevant laws and regulations of the Arab Republic of Egypt.
4. To maintain and use properly and effectively all the equipment purchased under the Grant Aid.
5. To bear all the expenses other than those to be borne by the Grant Aid for the execution of the Project.

Handwritten mark

Dr. Hussein El Shaff

JICA