

Chapter 3 Implementation Plan

Chapter 3 Implementation Plan

3-1 Implementation Plan

3-1-1 Implementation Concept

The Project will be implemented as a Japan's Grant Aid Project. Therefore, the following considerations will be included in preparing the implementation plan.

- 1) An implementation schedule will be reviewed between the Project implementing body on the Albanian side and the Japanese consultant and trading firms; and the scope of works that will be undertaken by the Albanian and Japanese sides as well as the execution schedule of each task will be decided. In order to prevent the execution of the works from becoming complex, the start and completion of the work will be adjusted.
- 2) In order to reduce the execution period as much as possible, the Japanese trading firm will be responsible for surveying the Pediatric Hospital, the shipping/delivery route of the equipment, the planned installation site of each Equipment, for confirming the electricity, water and drainage facilities and other infrastructure, and for preparing the delivery and installation work schedule two months before the established delivery period of the Equipment. It will be responsible for overseeing the temporary storage of the equipment, its delivery and installation, and to take adequate accident prevention measures.
- 3) The manufactures will provide On the Job Training (OJT) to the Albanian technicians on the operation and maintenance of equipment if necessary.
- 4) The Government of Albanian will be responsible for the foundation work for the X-ray unit that is required before it can be installed. In order to ensure that this work is accomplished in a timely manner, information on the installation cost and diagrams will be submitted to the Albanian side as soon as the equipment is procured.

- 5) Japanese technicians will supervise the installation and operations of both the general medical equipment, X-ray and diagnosis/analysis equipment supplied from Japan.

3-1-2 Implementation Conditions

In order not to disrupt the daily operations and activities of the Pediatric Hospital, the delivery schedule, route, storage of the equipment and the installation procedure will be carried out based on detailed discussions with the Pediatric Hospital. It is especially important that the installation of new equipment that will be replacing existing equipment is discussed carefully with the Pediatric Hospital to ensure that a large time span does not occur during the installation procedure that affects the examination and treatment activities.

3-1-3 Scope of Works

The implementation work will be divided between the Japanese and Albanian sides. The division of the work is given in Table 3-1.

Table 3-1 Scope of Works

No.	Items	To be covered by Grant Aid	To be covered by Recipient Side
1	To bear the following commissions to bank of Japan for the banking services based upon the B/A		
	1) Advising commission of A/P		●
	2) Payment commission		●
2	To ensure unloading and custom clearance at port of disembarkation in recipient country		
	1) Marine (Air) transportation of the products from Japan to recipient country	●	
	2) Tax exemption and custom clearance of the products at the port of disembarkation		●
	3) Internal transportation from the port of disembarkation to the project site	●	
3	To accord Japanese nationals whose services may be required in connection with supply of the products and the services under the verified contract such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work.		●
4	To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which may be imposed in the recipient country with respect to the supply of the products and services under the verified contracts		●
5	To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant Aid		●
6	To bear all the expense, other than those to be borne by the Grant Aid, necessary for the transportation and installation of the equipment		●

3-1-4 Consultant Supervision

(1) Implementation system

1) Project implementing body

The implementing body of the Project is the Ministry of Health and the recipient of the Project is the Pediatric Hospital. However, the Hospital Center will be responsible for the actual management and maintenance of the equipment provided by the Project.

2) Consultant firm

The Project will be implemented as a Japan's Grant Aid Project and in accordance with the standard procedure for Japan's Grant Aid Scheme, the Government of Albanian will sign a contract with a Japanese consultant firm that will be responsible for preparing a detailed design of the Project, for conducting the tender, supervising the implementation of the Project at all stages, for providing supervision, advice and coordination of the Project, and to carry out all other tasks required to ensure that the Project is implemented smoothly.

The specific task of the Japanese consultant firm is given below.

a. Implementation design

Prepare the tender documents to select the equipment supplier (instruction to tenderers, technical specifications, etc.)

b. Assistance during tendering process

Advise the Albanian side and prepare: the procurement method, the supplier's contract document, review the content of the equipment installation document, and selection of the supplier (announcement of the tender, conduct the tender and tender evaluation, negotiate the contract and be present during the signing of the contract)

c. Check and approve the shop drawings, etc.

Check and approve the equipment specification documents, shop drawings and implementation plan

- d. Report on conditions pertaining to the implementation of the Project
Submit a progress report to the Project implementing body and other relevant parties
- e. Assist with the payment approval procedure
Assist the procedure and review the content of the bill for remuneration following the shipment of the equipment
- f. Task of the consultant at the equipment installation
To be present at transportation and inspection of the equipment

3) Supplier

A Japanese firm (trading firm) that has been selected through the tender will procure the equipment. The trading firm will sign a contract with the Government of Albania and in accordance with the terms of this contract, it will be responsible for the procurement, ordering, manufacture, supply, delivery, installation and other tasks; and the equipment will be turned over to the Albanian side after providing guidance on the operation and maintenance of the equipment to the relevant Albanian parties.

(2) Project Personnel

The staff personnel from the Japanese consultant firm who will supervise the detailed design and the supervision of the Project are shown below.

- 1) Project manager : Responsible for the overall management of the consultant firm's work 1 person
- 2) Medical equipment planner : Analyze the Project equipment, prepare specifications documents and test the equipment 1 person
- 3) Interpreter : To interpret during the field survey, the tender and supervising of the Project 1 person

(3) Soft Component

In order to prevent divisions between the wards due to exclusive use of the equipment by any one ward, and to promote the common use and maintenance of the equipment through centralized management, soft components will be introduced to enable the effective and efficient use of the new equipment within the patient examination system of the Pediatric Hospital. Preparing an Albanian language version of the operations and maintenance manuals of the new equipment is part of the soft components. The numbers of staff members who will be assigned the work of overseeing the soft components are shown below.

- 1) Personnel in charge of the management system of equipment and parts
1 person
- 2) Personnel in charge of the quality control and maintenance system
1 person

3-1-5 Procurement Plan

(1) Policy on equipment procurement

The medical equipment that will be provided by the Project is not manufactured in Albania, therefore, it will be procured in Japan or third countries.

In order to effectively manage the equipment, it is important that a locally based after service system, as well as a local supplier for parts and consumables is established. Presently, many European and Japanese medical equipment is used at the Hospital Center and other medical institutions; and many of the foreign equipment manufacturers have offices in Albania as shown in "Table 3-2" below.

**Table 3-2 Manufacturer Branch Offices
Used by the Hospital Center**

Name of Office	Name of Manufacture
Siemens	Siemens
BNT Electronics	Toshiba
Iris	GE, Olympus, Radiometer, etc.
FMES Xhaxho	Drager, B. Braum, etc.
Fisher Scientific Albania	Fisher
Montal	Storz, Pentax, etc.

However, due to the isolationist policy of the past, the variety of consumables and other conditions of the manufacturer branch offices in Albania are limited in comparison to the branch offices in other countries. As a result, the Hospital Center has placed orders directly with the branch office in neighboring countries or in Europe. Therefore, the procurement of equipment from the branch offices of Japanese equipment manufacturers in the neighboring countries such as Italy, Austria, Switzerland and Macedonia, where there are direct daily flights, has also been considered (see "Table 3-3").

Equipment procured from Japan that will incur relatively high transport costs, in comparison to the cost of the equipment itself such as beds, the cabinet for reagents etc. will be procured from a neighboring third country such as Italy.

The sweat testing device for mucoviscidosis and so on are difficult to procure in Japan and will be purchased from third countries.

**Table 3-3 Branch Offices of Japanese Manufacturers
in Albania and Adjacent Countries**

Name of Manufacture	Name of Local Agent	Address	Tel
Aloka	EVRO-TIM	Razalovecko Vostaine 5/3-13 91000 Skopje, Macedonia	389-91-376783
Alola	ALOKA HOLDING EUROPE AG	Steinhauserstrasse 74 CH-6300, Zug, Switzerland	+41-41-748-3151
Atom	Burke & Bruke S.p.a.	Via Leonard Da Vinci, 27 20094 Corsico (Mirano) Italy	+39-02-458-5778
Nihon Kohden	PHARMAKON LTD. -HR	Ulica Grada Vukovara 234B 10000 Zagreb /CROATIA	385-1-611-6570
Nihon Kohden	SONOSAN -ITALIA	Duino 72/I 34013 Duino TS /ITALY	+39-348-730-55-79 +39-040-20-80-47
Nikon	NIKON EUROPE B.V.	P.O.Box 222, 1170AE Badhoevedorp, The Netherlands	+31-20-44-96-222
Olympus	Olympus D.O.O.ZA Trgovinu	Jurjevska 15, HR-10000 Zagreb, Croatia	385-1379-13-35
Olympus	Iris	-	-
Sakura	SAKURA Finetek Europe B.V.	Hoge Rijindijk 48a 2382 AT Zoeterwoude, The Netherlands	+31-71-589-8300
Shimadzu	TAURUS D.O.O.EL	Bul. Partizanski Odredi 23-1/7 1000 Skopje, Macedonia	+389-091-212772
Shimadzu	TAURUS ALBANIA SH.P.K.	Lagija 1 Maj Fier, Albania	+335-64-27700
Sysmex	Metaxas Diagnostics S.A.	9A, Leodiou GR-11745 Athens	+30-1-921-3001

(2) Policy on spare parts

A minimum quantity of spare parts and consumables that are needed to operate the equipment will be included in the Project. Specifically, during the soft component stage, the transfer of technology on the proper operations of the

equipment to the Albanian side will be carried out. This task will include preparing an inventory on spare parts and consumables, confirming their frequency of use, calculating the annual quantity needed, planning the purchasing period, establishing an ordering system, etc. In transferring this information to the relevant staff members of the Pediatric Hospital, the task of confirming the annual quantity of consumables that are required for the equipment should be carried out at least once every three (3) months in conjunction with the quarterly periods of the Hospital Center. It is anticipated that it will take at least another three (3) months for the Hospital Center to actually establish an ordering system based on this data, place an order and have it delivered. In view of these circumstances, the Project will provide six (6) months of spare parts and consumables.

(3) Transport plan

The Pediatric Hospital is located about three (3) kilometers northeast from the center of Tirana City. It is located within the compound of the Hospital Center next to Tirana University and it is about ten (10) minutes by car from the center of the city. Although the roads are paved, there are many potholes where rainwater accumulates. The condition of the 50km road from Durres Port to Tirana City is poor and it takes about one (1) to two (2) hours to cover this distance.

Ocean transport will be used to ship the equipment from Japan or Europe. It is common practice to transport the equipment by container from the port due to the road conditions. Since Durres Port, the trading port in Albania, does not have cargo handling facilities for containers, the container which is shipped from Japan or Europe is loaded onto a truck at Triste, the port in Italy; the truck with the container travels to Durres Port by ferry, and from Durres Port, the truck travels to its destination or the Project site. The Project will also utilize this route to transport the equipment from Japan or Europe to the Pediatric Hospital. If tax exemption documents are submitted to the Custom Directorate, Ministry of Finance two (2) weeks before the container's scheduled arrival, the container will pass through customs clearance at Durres Port in one (1) day.

The delivery and installation of the Equipment is scheduled during the dry season of August to September. The average rainfall during this period is about 30mm, therefore, rainfall is not expected to affect the Project implementation schedule.

3-1-6 Implementation Schedule

(1) Implementation Schedule

When the Project is implemented as a Japan's Grant Aid, after the signing of E/N (Exchange of Notes) with both Governments, the task of preparing the tender documents, conducting the tender to select the supplier that will procure and install the equipment, the signing of contracts, and obtaining the official approval by the Government of Japan must be carried out before the procurement and installation of the equipment is implemented. The implementation schedule of the Project is given below.

Table 3-4 Project Implementation Schedule

Month	1	2	3	4	5	6	7	8	9	10	11	12
Detailed Design & Tendering	□ (Site Survey)										Total 3.5 months	
	□ (Preparation of Tender Document)											
		□ (Approval of Tender Document)										
			□ (Tender Procedure)									

Month	1	2	3	4	5	6	7	8	9	10	11	12
Execution & Procurement	□ (Ordering & Manufacturing)										Total 7.0 months	
				□ (Transportation)								
						□ (Delivery & Installation)						
					□		□ (Soft Component)					

Remarks : □ Japan □ Albania

(2) Implementation period

The Project will be implemented during the period as described below.

1) Confirming the Project content and preparing tender documents

Based on the Basic Design Study Report, the tender documents will be prepared following the final confirmation of the Project's content. The amount of time allocated for this work is 2.0 months.

2) Tender

A tender will be held to select the supplier that will be responsible for procuring and installing the equipment that will be provided by the Project, based on the tender documents and content of the Project. The tender will be held in the presence of relevant parties and a Japanese firm will be selected. The amount of time allocated for this task is 1.5 months.

3) Equipment procurement and installation

Following the signing of the procurement and installation contract and the approval of the contract by the Government of Japan, the procurement work will commence (placing the order, manufacture and shipment). The total amount of time estimated for procurement and installation tasks is 6 months - 5.0 months for procurement and 1.0 months for installation.

4) Soft components

The Project will incorporate soft components, which consist of establishing a centralized management system for the equipment and providing an Albanian language version of the operations and maintenance manuals after the equipment has been delivered. The estimated time period required to complete the soft components is 0.5 month before the equipment has been installed and after the equipment has been turned over to the Albanian side is 1.0 months.

3-1-7 Obligations of the Albanian Side

In the implementation of the Project, the Albanian side is required to complete the tasks outlined below. These tasks must be completed within the stipulated time period.

1) Provide working space

The Albanian side will be responsible for providing a work area or space at the Project site during the Project implementation period.

2) Renovation work on the facilities and removal of the existing equipment

The Albanian side will be responsible for installing the required electricity, water supply and drainage facilities, and other utilities needed to operate the new equipment and for carrying out any required renovation work on the installation sites of the new equipment. This work must be completed before the new equipment is installed. In addition, the Albanian side will be responsible for removing the existing equipment that will be replaced.

3) Tax exemption measure

All of the equipment that will be provided by the Project will be imported equipment. Therefore, the Albanian side will be responsible for obtaining tax exemption documents during the implementation period and additionally, for obtaining tax and other tariff exemptions for the Japanese personnel who will be staying in Albania to oversee the implementation of the Project.

4) Banking Arrangements with a bank of Japan

During the Project implementation stage, the Government of Albania shall make Banking Arrangements (B/A) with a bank of Japan and issue Authorization to Pay (A/P) to the bank promptly after verification of consultant agreement and supplier's contract.

5) Exemptions for the Japanese Project personnel in Albania

The Albanian side will be responsible for overseeing the various exemptions and considerations for the Japanese Project personnel who will be staying in Albania to supervise the delivery of the equipment and the overall implementation of the Project.

6) Budget and personnel for operations and maintenance

The Albanian side will be responsible for providing the budget and staff members needed to effectively manage the implementation of the Project.

7) Monitoring

The Albanian side will be responsible for monitoring the use and maintenance of the equipment provided under the Grant Aid, in order to ensure that it is appropriately and effectively used and maintained; and a report based on the monitoring activities will be submitted periodically to the Government of Japan.

8) Other expenses

The Albanian side will be responsible for bearing all the costs that are necessary to implement the Project, which are not covered by the Japan's Grant Aid Project.

3-2 Project Costs Estimation

(1) Estimated Project Costs borne by the Albanian Side

The Project cost for the Albanian side if the Project is implemented as a Japan's Grant Aid Project, is estimated at US\$159,464 (about 17,203,000 yen). The breakdown is as follows.

Following the signing of the E/N, an agreement with the Ministry of Health and the Government of Albania will be signed, and the tax exemptions and a special budget to cover other required costs will be allocated. Of these costs, the tariff exemption related costs (5% of the equipment cost) would be paid by the Ministry of Health to the Custom Directorate, Ministry of Finance. However, this transaction will be carried out in document only and there will be no actual transferal of cash payment.

Table 3-5 Project Costs of the Albanian Side

Scope of Works	Amount
1. Cost of facilities and utilities renovation for Equipment Installation	4,634 US\$ (500,000 yen)
2. Cost of tax exemption	150,889 US\$ (16,278,000 yen)
3. Cost of custom clearance	150 US\$ (16,000 yen)
4. Bank commissions	3,791 US\$ (409,000 yen)
Total	159,464 US\$ (17,203,000 yen)

(2) Estimate Conditions

The Project cost was estimated according to the following conditions.

Period of Calculation:	July 2000
Exchange Rate:	1 US\$ = 107.88 yen 1 EURO = 104.17 yen 1 LEK = 0.88 yen
Implementation Period:	Final confirmation of Project content, preparation of tender documents, the equipment procurement will be carried out according to the implementation schedule.
Others:	The Project will be implemented in accordance with the Japan's Grant Aid Scheme.

3-3 Operations and Maintenance Cost

(1) Operations and maintenance plan

The equipment that will be provided by the Project will mainly be new replacements of existing depreciated equipment as well as basic medical equipment that will supplement the equipment that is lacking in the Pediatric Hospital's medical services. Based on past experience, no problems are foreseen in the operations and technical maintenance and management of the equipment after it has been installed.

The physicians and clinical technicians at the Pediatric Hospital will carry out the daily operations and maintenance of the equipment. Many of these staff members have studied or worked abroad and their level of technical expertise is uniform.

Repair work of the equipment that will be provided by the Project will be carried out by qualified staff members and the repair workshop at the Bio-medical Department of the Hospital Center, as well as by BENC, located adjacent to the Hospital Center; and very few problems are anticipated in the technical maintenance and repair of the equipment.

(2) Maintenance Costs

Among the equipment that will be provided by the Project as well as the equipment provided by other donors such as the GTZ, the X-ray unit and the sweat testing device for mucoviscidosis will generate maintenance costs as shown in the "Appendix Table 2". The estimated maintenance cost of this equipment is given in the Table below.

Table 3-6 Estimated Maintenance Costs

Item	Operation and Maintenance Cost	(Portion of Consumables)
A. Forseeing the Increase of Operation and Maintenance Cost of the Equipment provided by this Project	6,045,000 yen	(4,394,000 yen)
B. Operation and Maintenance Cost by this Project by Existing Equipment	1,510,000 yen	(1,498,000 yen)
C. Forseeing the Increase of Operation and Maintenance Cost by Other Donors' Project (Excluding CT Scanner)	816,000 yen	(146,000 yen)
D. Forseeing the Increase of Operation and Maintenance Cost of CT Scanner	3,365,000 yen	—
Cost Increase by this Project	A - B	4,535,000 yen (2,896,000 yen)
Cost Increase including Other Donors' Project (Excluding CT Scanner)	A + C - B	5,351,000 yen (3,042,000 yen)
Cost Increase including CT Scanner	A + C + D - B	8,716,000 yen —

The overall operating costs of the Hospital Center in 2000 (electricity, water, lighting, heating, repair contract cost, purchase of consumables, etc.) is about 621,803,000 yen and of this figure, the actual budget for medical supplies and consumables for the entire the Central Pharmacy of Hospital Center is about 232,427,000 yen. Of this budget, the estimated cost of the Pediatric Hospital is about 25,060,000 yen and 12,320,000 yen for the Pediatric Emergency Laboratory. The budget for the Pediatric Emergency Laboratory, which is a segment of the Pediatrics Hospital, is included in the budget of the Pediatrics Hospital as a separate item under medical supplies. Therefore, total budget of Pediatric Hospital is about 37,380,000 yen.

The ratio of increased maintenance costs within budget is shown "Table 3-7". The electricity costs of the Pediatric Hospital are included within the overall operating costs of the Hospital Center, therefore, only the increased cost of the medical supplies and consumables are considered with the Central Pharmacy Budget.

Table 3-7 Ratio of Operation and Maintenance Cost in the Budget

	O/M (Operation & Maintenance) Cost	% of Hospital Center's Running Cost	Consumables Cost of the O/M Cost	% of Central Pharmacy Budget
Cost Increase per Year by the Project	4,535,000 yen	0.73%	2,896,000 yen	1.25%
Cost Increase per Year excluding CT Scanner	5,351,000 yen	0.86%	3,042,000 yen	1.31%
Cost Increase per Year including CT Scanner	8,716,000 yen	1.40%	—	—

As can be seen from the table above, the anticipated increase in the maintenance costs stemming from equipment provided by the Project as well as other donors (excluding the CT scanner) is only 0.86 percent of the entire operating budget of the Hospital Center. Therefore, it was concluded that this increased amount was within the scope of the Hospital Center budget.

If the CT scanner is included in the estimation, the increased maintenance cost is only 1.4 percent of the operating budget and it was concluded that this amount would not burden the operating budget.

Presently, 1,700 cases of pediatric surgery are carried out in the general surgery ward annually. These surgeries as well as their costs and the budget will be transferred to the new pediatric surgery ward. Therefore, the costs generated by pediatric surgery will not affect the Hospital Center, and it was concluded that there were no foreseeable problems in terms of costs.

In view of these circumstances, it was concluded that the maintenance costs generated by the equipment provided by the Project as well as other donors would be adequately covered by the existing budget of the Hospital Center.

Chapter 4 Project Evaluation and Recommendation

Chapter 4 Project Evaluation and Recommendations

4-1 Project Effect

4-1-1 Appropriateness of the Project

The significance of implementation of the Project as a Grant Aid project is appropriated based on the following factors.

1) Improving the health care conditions

The equipment by the Project will provide quantitative and qualitative improvements to the health care activities of the Pediatric Hospital for the direct beneficiaries of the Project - the medical staffs (438) and patients (about 30,000 outpatients and 9,000 inpatients annually). The Pediatric Hospital will be able to improve the health care conditions of the Albanian children (about 1,100,000) and thereby, contribute to the goals of the "Albanian Health System Reform", which is to improve the quality of health care services by providing comprehensive medical facilities and equipment and maternal and child health care services. In addition, the Project also supports one of the major goals of the new public investment plan presently under preparation, which is to improve the health of Albanian citizens.

2) Adequate capability to receive assistance

Presently, many of the medical staffs employed at the Pediatric Hospital have studied abroad and have an adequate level of technical expertise. Therefore, the medical staffs are capable of utilizing the equipment to provide improved health care services and a very positive outcome is expected.

3) Adequate maintenance of the equipment

The Pediatric Hospital is one facility in the University Center of Tirana. The maintenance and repair of the center's medical equipment are carried out by BENC, which is under the jurisdiction of the Ministry of Health. The technical level and expertise of its staff members and the maintenance and

repair system of BENC are capable of adequately maintaining and repairing the equipment provided by the Project.

4-1-2 Benefits

(1) Direct benefits

If the Project is implemented, the 438 medical staffs, including the 51 physicians at the Pediatric Hospital, about 30,000 outpatients and 9,000 inpatients will receive the following direct benefits.

1) Improved treatment and diagnostic services

Presently, the existing medical equipment of the Pediatric Hospital is greatly depreciated and there is a shortage of basic equipment. As a result, diagnostic services can not be adequately provided. Therefore, the Project will provide medical equipment that will improve the health care services of the Pediatric Hospital and enable swift diagnoses and adequate treatment activities under an improved system. Due to depreciation and the shortage of equipment, the Project will also enable the Pediatric Hospital to diagnose and treat difficult illnesses.

2) Improving the technical skills of health care personnel

The existing equipment of the Pediatric Hospital was purchased during the administration of the former socialist government and it is greatly depreciated. Consequently, despite the large number of medical staffs who have studied abroad, they have missed their opportunity to use the latest medical equipment in their routine activities so far. Therefore, the Project, which will provide the latest medical equipment, will enable advance health care activities to be carried out and will contribute to improving the expertise of the physicians and other health care personnel.

3) Efficient diagnostic system

The equipment that will be provided by the Project will help the Pediatric Hospital to introduce systematized health care services, reduced working

hours, simplified tasks, improved accuracy and other benefits. In addition, early detection and swift treatment of diseases will become possible, as well as a reduced treatment and hospitalization period for the patients. The turnover of outpatients will be more efficient and rapid and the estimated number of hospitalized patients is anticipated to increase.

4) Reducing the burden of the patient

The Project will enable the Pediatric Hospital to carry out accurate and swift diagnoses and adequate treatment activities. In addition, the Pediatric Hospital will be able to handle illnesses that were hitherto difficult to diagnose or treat without the proper equipment. As a result, the patients' period of treatment and hospitalization, the physical and emotional burden on the patient and the family, and the economic burden on the patients' families will be reduced.

(2) Indirect benefits

1) Improving the health care environment of children

The Pediatric Hospital is top-referral health care facility for children, as well as the primary and secondary health care facility in Tirana City. It also provides health care services for outpatients throughout the country and is a training hospital of the Faculty of Medical, University of Tirana. However, due to Albania's long years of isolationism and the economic turmoil at the beginning of introducing free-market economy, the equipment and facilities of the Pediatric Hospital are greatly depreciated and basic equipment is lacking. Consequently, the Pediatric Hospital has been unable to conduct adequate diagnoses and treatment activities.

Therefore, due to the implementation of the Project, the Pediatric Hospital will have an improved diagnostic and treatment system and improved health care services. In future, it will contribute to the improved health of Albanian children nationwide (about 1,100,000 beneficiaries).

2) Comprehensive functions as a university hospital

The equipment provided by the Project will enable hospital training for medical students and retraining sessions for medical staffs. Subsequently, more intensive training content and effectiveness are anticipated. The Project will contribute to producing health care personnel with higher technical expertise and a more integrated medical education.

As the functions of the university hospital improve, the Pediatric Hospital will be able to conduct research in diagnoses and treatment methods that will contribute to a more integrated medical science.

4-2 Recommendation

Resolving the issues explained below will ensure that the Project is implemented efficiently and effectively.

(1) Securing a budget

The Ministry of Health, the University Center and the Pediatric Hospital, which are the implementing bodies of the Project, must ensure that the maintenance and personnel costs are met.

(2) Establishing the functions of the Pediatric Hospital

With the introduction of a shared and centralized maintenance system by the Project implemented that will enable the equipment to be utilized effectively and efficiently, the hospital's functions are anticipated to improve and the special functions of each ward to become more integrated. Therefore, a new diagnostic and treatment system, as well as hospital organization should be instituted to avoid the divisions in each ward as soon as possible, based on a review of the daily activities of the Pediatric Hospital.

(3) Need for monitoring activities

In order to comprehensively grasp the impact and problems that may arise after the Project is implemented, the conditions surrounding the use of the equipment

provided by the Project, its maintenance and operations, the maintenance system, budgetary measures and other factors must be monitored, and the findings compiled as a point of reference that can be used by the Pediatric Hospital for self-review purposes.

In addition, a detailed record of the daily use and maintenance of major items of equipment must be maintained, in order to prevent serious breakdowns and failures of the equipment.

(4) Signing a maintenance service contract

To ensure the sustained use of a segment of the equipment provided by the Project, a service contract must be signed with the branch office of the manufacturer. Therefore, a service contract should be signed promptly to ensure the long-term use and proper maintenance of these items of equipment.

Appendices

Appendix 1 Member List of the Study Team

1. Basic Design Study

Name	Position	Organization
(1) Mr. Yasuhiko MORIMOTO	Team Leader	2nd Project Management Div., Grant Aid Management Dept., JICA
(2) Ms. Masami OISHI	Grant Aid Cooperation	Grant Aid Div., Economic Cooperation Bureau, Ministry of Foreign Affairs
(3) Dr. Iwao TAKAKURA	Technical Adviser	Professor Emeritus, Tokai University
(4) Mr. Hiroshi ABO	Project Manager / Hospital Management	System Science Consultants Inc.
(5) Dr. Tetsuo TOMIYAMA	Equipment Planner	System Science Consultants Inc.
(6) Mr. Akihiro HAYAKARA	Facility Planner and Utilities Planner	System Science Consultants Inc.
(7) Ms. Keiko NAMIKI	Procurement / Cost Planner	System Science Consultants Inc.

2. Explanation of Draft Basic Design

Name	Position	Organization
(1) Kazumi JIGAMI	Team Leader	Director, 2nd Project Management Div., Grant Aid Management Dept., JICA
(2) Iwao TAKAKURA	Technical Adviser	Professor Emeritus, Tokai University
(3) Masaru KOZONO	Coordinator	Grant Aid Management Dept., JICA
(4) Hiroshi ABO	Project Manager / Hospital Management	System Science Consultants Inc.
(5) Tetsuo TOMIYAMA	Equipment Planner	System Science Consultants Inc.
(6) Keiko NAMIKI	Procurement / Cost Planner	System Science Consultants Inc.

Appendix 2 Survey Schedule

2-1 Basic Design Study

No. of days	Date	Official Members			Consultant Members																																											
		Team Leader	Technical Adviser	Grant Aid Cooperation	Project Manager/ Hospital Management	Equipment Planner	Facilities and Utilities Planner	Procurement/Cost Planner																																								
1	2. April	Sun	Narita→Frankfurt→Rome			Narita→Rome	←	←	←																																							
2	3. April	Mon	Courtesy to Embassy of Japan in Rome			←	←	←	←																																							
3	4. April	Tue	Rome→Tirana PM : Courtesy to Ministry of Economic Cooperation & Trade (MECT)			←	←	←	←																																							
4	5. April	Wed	AM : Discussion with Ministry of Health (MOH) Discussion with EU Phare PM : Discussion with ECHO, WHO	AM : Discussion with Ministry of Health (MOH) Inspection of Pediatric Hospital PM : Discussion with Pediatric Hospital	Narita→Frankfurt→Rome	Same as Team Leader	Same as Technical Adviser	Same as Technical Adviser																																								
5	6. April	Thu	AM : Discussion with GTZ Discussion with MOH PM : Discussion with Pediatric Hospital			←	←	←																																								
6	7. April	Fri	AM : Discussion with Hospital Center Discussion with Pediatric Hospital PM : Discussion with Pediatric Hospital Discussion with MOH			Discussion with Pediatric Hospital (Content of Project)	←	←																																								
7	8. April	Sat	Discussion with Pediatric Hospital			←	←	←																																								
8	9. April	Sun	Internal Work, Team Meeting			←	←	←																																								
9	10. April	Mon	Discussion with Ministry of Foreign Affairs (MOFA), MOH and MECT	Discussion with Pediatric Hospital	Same as Team Leader	Discussion with Pediatric Hospital (Content of Project) Discussion with GTZ	Discussion with Pediatric Hospital (Content of Equipment)	←																																								
10	11. April	Tue	Discussion with Pediatric Hospital			Discussion with Pediatric Hospital (Content of Project) Discussion with CINS	Discussion with Pediatric Hospital (Content of Equipment)	←																																								
11	12. April	Wed	Discussion with Pediatric Hospital Discussion on "Minutes of Meeting"			←	Discussion with Pediatric Hospital (Content of Equipment)	←																																								
12	13. April	Thu	Signing on "Minutes of Meeting"			←	Discussion with Pediatric Hospital (Content of Equipment)	←																																								
13	14. April	Fri	Tirana→Vienna Report to JICA Austria Office	Tirana→Rome Report to Embassy of Japan in Rome	Narita→Frankfurt→Rome	Discussion with Pediatric Hospital (Content of Project)	Discussion with Pediatric Hospital (Content of Equipment)	Narita→Rome	Survey in Pediatric Hospital, MOH (Procurement)																																							
14	15. April	Sat	Vienna→Frankfurt→	Rome→		Documentation and Meeting	←	Rome→Tirana	←																																							
15	16. April	Sun	→Narita	→Narita	Documentation and Meeting	←	Team Meeting Inspection of Pediatric Hospital	←																																								
16	17. April	Mon				Discussion with Pediatric Hospital (Content of Project, O/M)	Discussion with Pediatric Hospital (Content of Equipment)	Survey in Pediatric Hospital (Facility, Electricity, Water Supply, Layout, etc.)	Inquiry with Agent/ Distributor (Resemble Equipment, Delivery of Questionnaire)																																							
17	18. April	Tue							Discussion with Pediatric Hospital (Content of Project, Organization, O/M) Discussion with GTZ	Discussion with Pediatric Hospital (Content of Equipment)	Survey in Pediatric Hospital (Facility, Electricity, Water Supply, Layout, etc.) Discussion with GTZ	Procurement Survey of Resemble Hospital and Other Donor																																				
18	19. April	Wed										Discussion with MOH (Organization, O/M, Budget)	Discussion with Pediatric Hospital (Content of Equipment)	Discussion with Architecture Office Discussion with CINS Inquiry with Agent	Study of Transportation Company and Trading Firm (Delivery of Questionnaire)																																	
19	20. April	Thu													Discussion with Pediatric Hospital (O/M, Budget)	Survey in Pediatric Hospital (Existing Equipment, Ability of Maintenance)	Discussion with Architecture Office Survey of Archives Office	Survey of Agent/ Distributor																														
20	21. April	Fri																Discussion with MOH (Budget)	Survey in Pediatric Hospital (Existing Equipment, Ability of Maintenance)	Survey of Building Regulations (Labor Force, Architecture Office, etc.)	Inquiry with Transportation Company and Trading Firm																											
21	22. April	Sat																			Documentation and Meeting	←	←	←																								
22	23. April	Sun																						Documentation and Meeting	←	←	←																					
23	24. April	Mon																									Discussion with Pediatric Hospital (Layout Plan)	Discussion with Pediatric Hospital (Specification of Equipment)	Discussion with Pediatric Hospital (Facility Plan, installation)	Supplementary Survey of Agent/ Distributor																		
24	25. April	Tue																												Survey of Resemble Hospitals (Diagnostic Center)	Discussion with Pediatric Hospital (Specification of Equipment)	Survey of Infrastructure (Water Supply, Electricity)	Survey of Transportation Company and Trading Firm															
25	26. April	Wed																															Discussion with Pediatric Hospital (Content of Project, Obligation of Albanian Side)	Discussion with Pediatric Hospital (Specification of Equipment)	Discussion with Pediatric Hospital (Facility Plan, installation)	Discussion with Pediatric Hospital (Procurement Plan)												
26	27. April	Thu																																		Rap-up Meeting Report to MOH, MOFA, MECT	←	←	←									
27	28. April	Fri																																					Tirana→Rome Report to Embassy of Japan	←	←	←						
28	29. April	Sat																																								Inquiry with Agent	←	←	←			
29	30. April	Sun																																											Rome→	←	←	←
30	1. May	Mon																																														→Narita

2-2 Explanation of Draft Final Report

No. of days	Date		Official Members			Consultant Member		
			Team Leader	Coordinator	Technical Adviser	Project Manager/ Hospital Management	Equipment Planner	Procurement/Cost Planner
1	23. Jul	Sun				Narita→Vienna	←	←
2	24. Jul	Mon				Courtesy to JICA Austria Office Vienna→Tirana Discussion with Pediatric Hospital	←	←
3	25. Jul	Tue				Discussion with Pediatric Hospital Inspection of Pediatric Hospital	←	←
4	26. Jul	Wed				Discussion with Pediatric Hospital Survey of Pediatric Hospital	←	←
5	27. Jul	Thu				Discussion with MOH Discussion with GTZ	Discussion with Pediatric Hospital Inspection of Hemodialysis Center	←
6	28. Jul	Fri				Discussion with Minister of Health	Discussion with Pediatric Hospital	←
7	29. Jul	Sat	→Paris	Narita→Frankfurt→Vienna	Documentation and Meeting	←	←	
8	30. Jul	Sun	AM : Paris→Vienna Vienna→Tirana PM : Team Meeting	AM : Vienna→Tirana PM : Team Meeting	Documentation and Meeting	←	←	
9	31. Jul	Mon	AM : Discussion with Ministry of Foreign Affairs (MOFA), MOH and MECT PM : Inspection of Pediatric Hospital	Discussion with Pediatric Hospital	←	←	←	
10	1. Aug	Tue	Inspection of Durres Port	Discussion with Pediatric Hospital	Same as Team Leader	Discussion with Pediatric Hospital	←	
11	2. Aug	Wed	AM : Discussion with Hospital Center PM : Discussion with Pediatric Hospital Discussion on "Minutes of Meeting"		←	Discussion with Pediatric Hospital	←	
12	3. Aug	Thu	AM : Signing on "Minutes of Meeting" PM : Tirana→Vienna		AM : Signing on "Minutes of Meeting" PM : Survey of Pediatric Hospital	←	←	
13	4. Aug	Fri	Report to JICA Austria Office Vienna→Rome Report to Embassy of Japan in Rome	Report to JICA Austria Office Vienna→Frankfurt→	Survey of Pediatric Hospital	Discussion with Pediatric Hospital	←	
14	5. Aug	Sat	Rome→	→Narita	Documentation and Meeting	←	←	
15	6. Aug	Sun	→Narita		Documentation and Meeting	←	←	
16	7. Aug	Mon				Survey of Pediatric Hospital	Discussion with Pediatric Hospital	←
17	8. Aug	Tue				Rap-up Meeting Report to MOH	←	←
18	9. Aug	Wed				Tirana→Vienna	←	←
19	10. Aug	Thu				Report to JICA Austria Office Vienna→	←	←
20	11. Aug	Fri				→Narita	←	←

Appendix 3 List of Party Concerned with the Study

1. Ministry of Health

Dr. Leonard Solis	Minister
Dr. Gjezgj Koj	Deputy Minister
Mr. Petro Mersini	Chief of Cabinet of Minister
Dr. Fatmir Brahim	Director of Coordinator Hospital Dept.
Ms. Ehad Mersihi	Chief of Medical Programme of Hospital Dept.
Mr. Alfred Prifti	Engineer of Sector of Administration of Hospital Dept.
Mr. Thanas Poçi	Director of Economic & Investment Dept.
Mr. Sokol Dedça	Chief of Budget, Economic & Investment Dept.
Dr. Petrit Vasili	Director of Primary Health Care Dept.
Dr. Andrea Gudha	Director of Human Resources dept.
Ms. Nurie Çausi	Director of Statistics Dept.

2. Ministry of Economic Cooperation and Trade

Mr. Aliosha Gjondedaj	Aid Coordination Unit
Mr. Azben Ballabani	Aid Coordination Unit

3. Health Insurance Institute of Albania

Dr. Vigan Saliasi	General Director
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4. University Hospital Center of Tirana "Mother Teresa", Administration

Dr. Mustafa Xhani	Prof.	Director of University Hospital Center
Dr. Eli Foto	As. Prof.	Vice Director of University Hospital Center
Ms. Lejla Malasi	Chief	Investment Dept.
Ms. Mirlinda Tase	Chief	Technical Dept.
Mr. Alben Horks	Chief	Biomedical Engineering Dept.
Ms. Alferdita Tavan	Chief	Support Services Dept.
Ms. Vera Agolli	Chief	Finance Dept.
Ms. Zena Bineri	Chief	Pharmacy Dept.
Mr. Artan Lleshi	Chief	Engineer of Administration

5. Pediatric Hospital "Mother Teresa"

Dr. Durim Bebeçi	Prof.	Chief of General Pediatric Service,
Dr. Anila Godo	As. Prof.	Chief of Haemato-oncology,
Dr. Georgina Kule		Chief of Aerogen & infectious disease

Dr. Luan Xhelili		Chief of Nephrology
Dr. Krenar Preza	Prof.	Chief of Radiology
Dr. Sashenka Dega	As. Prof.	Chief of Intensive Care Unit
Dr. Luljeta Kote	As. Prof.	Chief of Pnuemo-Allegy
Dr. Valentina Goxhi	As. Prof.	Chief of Neurology
Dr. Hysen Heta	As. Prof.	Chief of Surgery
Dr. Pascali Cullufi	As. Prof.	Chief of Gastro-enteralogy
Dr. P. Hoxlue	As. Prof.	Chief of Endoclinology
Dr. Sinan Kuka		Chief of Otorhinolaryngology (E.N.T.)
Dr. Raimondo Niko		Chief of Cardiology
Dr. Ndok Markll		Chief of Department of Laboratory

6. World Bank

Mr. Besim Nuri Health Specialist

7. WHO (World Health Organization)

Mr. Vasil Miho Rieson office Coordinator

8. EU Phare

Ms. Brikena Tare Task Manager of PMU Phare Health

9. ECHO (European Community Humanitarian Office)

Ms. Silva Mitro Health Program Officer

10. GTZ (Deutsche Gesellschaft für Technische Zusammenarbeit)

Mr. Ismail Beka Coordinator for Technical Cooperation

Mr. Nierk Oldorff Health Specialist&Civil Engineer&

11. CINS (Cooperazione Italiana Nord Sud)

Ms. Paola Silvestri Staff

12. Embassy of Japan in Italy

Mr. Keiji Yamamoto Deputy Head of Mission Minister

Mr.Hideki Uezono Second Secretary

13. JICA Austria Office

Mr. Ikufumi Tomimoto Resident Representative

Ms. Akiko Nanami Assistant Resident Representative

Appendix 4 Minutes of Discussions

4-1 Basic Design Study

MINUTES OF DISCUSSIONS ON THE BASIC DESIGN STUDY
ON THE PROJECT FOR THE IMPROVEMENT OF MEDICAL EQUIPMENT
FOR THE PEDIATRIC HOSPITAL "MOTHER TERESA" OF UNIVERSITY CENTER
OF TIRANA
IN THE REPUBLIC OF ALBANIA

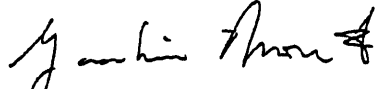
In response to the request from the Government of the Republic of Albania (hereinafter referred to as "Albania"), the Government of Japan decided to conduct a Basic Design Study on the Project for the Improvement of Medical Equipment for the Pediatric Hospital "Mother Teresa" of University Center of Tirana (hereinafter referred to as "the Project") and entrusted the study to Japan International Cooperation Agency (hereinafter referred to as "JICA").

JICA sent to Albania the Basic Design Study Team (hereinafter referred to as "the Team"), which is headed by Mr. Yasuhiro Morimoto, Deputy Director of the Second Project Management Division, Grant Aid Management Department, JICA, and is scheduled to stay in the country from April 4, 2000 to April 28, 2000.

The Team held discussions with the officials concerned of the Government of Albania and conducted a field survey at the study area.

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

Tirana, April 13, 2000


Yasuhiro MORIMOTO
Leader
Basic Design Study Team
Japan International Cooperation Agency


Leonard SOLIS
Minister of Health
Republic of Albania



ATTACHMENT

1. Objective of the Project

The objective of the Project is to improve the quality of medical services to patients at the Pediatric Hospital "Mother Teresa" of University Center of Tirana through procurement of medical equipment.

2. Project site

The site of the Project is the Pediatric Hospital "Mother Teresa" of University Center of Tirana, which is located in Tirana, Albania.

3. Responsible and Implementing Organization

The responsible and implementing organization is Ministry of Health.

4. Items requested by the Government of Albania

After discussions with the Team, items described in Annex 1 were finally requested by the Albanian side. JICA will assess the appropriateness of the request and items to be included in the Project will be finalized after further study in Japan.

5. Japan's Grant Aid Scheme

5-1. The Albanian side understands the Japan's Grant Aid Scheme explained by the Team, as described in Annex-2.

5-2. The Albanian side will take the necessary measures, as described in Annex-3, for smooth implementation of the Project, as a condition for the Japanese Grant Aid to be implemented.

6. Schedule of the Study

6-1. The consultants will proceed to further studies in Albania until April 28, 2000.

6-2. JICA will prepare the draft report in English and dispatch a mission in order to explain its contents around July, 2000.

6-3. In case that the contents of the report is accepted in principle by the Government of Albania, JICA will complete the final report and send it to the Government of Albania by November, 2000

7. Other relevant issues

7-1. Renovation

(a) The Albanian side explained the Team that the ongoing renovation of the buildings, which is financed by ECHO, GTZ and its own, will be finished by the end of June, 2000.

(b) The Team requested the Albanian side to clarify the new arrangement and location of existing sections after the renovation by pointing it out in the new layout plan. The Albanian side confirmed to present it to the Team by the end of April.

7-2. Centralization

The team explained that centralizing the management of several equipment, such as endoscope, ultrasound apparatus, ECG machine and so forth, could achieve effectiveness. The Albanian side understood the idea and confirmed that the Albanian side will introduce it when the Japanese Grant Aid will be implemented.

7-3. Endoscope

The Team emphasized the importance to establish an endoscope section/room to handle all kinds of endoscopes in one place. The Albanian side agreed with the proposal and will locate the endoscopes in a newly renovated room with recommended specification.

7-4. X-ray Room

The Albanian side confirmed that the Albanian side will repair the X-ray room according to the requirement necessary for radiation shielding by August, 2000.

7-5. Budget Allocation

The Albanian side confirmed that the Albanian side will take necessary measures to secure sufficient budget for local cost, which includes expenditure for operation, maintenance, tax exemption and custom clearance for the equipment procured under the Japanese Grant Aid, and requested the Team to estimate the amount which the Albanian side should allocate for in relation to the Project. The Team confirmed that the cost to be born by the Albanian side will be estimated and mentioned in the draft report.

7-6. Soft Component

The Albanian side requested the following consulting services to be included as one of the components of the Japanese Grant Aid for smooth implementation of the Project;

- (a) Preparation of operation and maintenance manual in Albanian language,
- (b) Training of operation and maintenance at the installation of the equipment by the party which prepared the above-mentioned manual,
- (c) Instruction for introducing and setting up the centralized management system in the hospital.



Equipment List

No.	Equipment Name	Priority		
		A	B	C
I. COMMON UTILIZATION				
1	Small weight scale	17		
2	Large weight scale	17		
3	Infant ruler	17		
4	Height measure	17		
5	Infrared thermometer	5		
6	Conventional thermometer	17	28	
7	Rectal-thermometer	4		
8	Digital-thermometer	17	17	
9	Sphyngnomanometer (stand-type)	32		
10	Sphyngnomanometer (tabletop-type)	2		
11	Hanger stand	84		
12	X-ray film illuminator (negatoscope)	28		
13	Monitor	38	29	
14	Electric suction unit	28		
15	Syringe infusion pump	15		
16	Infusion pump	34		
17	Medicine cabinet		14	
18	Instrument cabinet	14		
19	Instrument carriage		14	
20	Pediatric examining table	22		
21	Infant cot	30		
22	Infant bed	20	20	
23	Bed	25	25	
24	Folding bed		50	
25	ICU bed	10	10	
26	Mattress	45	45	
27	Overbed table		50	
28	Laundry cart	17		
29	Stretcher	7		
30	Wheel chair	5	4	

II. GENERAL PEDIATRIC SERVICES				
WARD-7				
1	Diagnostic set	2		
WARD-8				
2	Diagnostic set	5		
WARD-10				
3	Diagnostic set	3		
4	Lumbar anaesthesia needles			500
5	Oxygen flowmeter set	2		
6	Hot water bottle	4		

Equipment List

No.	Equipment Name	Priority		
		A	B	C
WARD-11				
7	Diagnostic set	1		
8	Infant warmer	1		
9	Oxygen face mask (small & medium size)	2X2		
10	Ambu bag (small & medium size)	2X2		
11	Oxygen flowmeter set	2		
12	Pulse oxymeter	2		
13	High pressure steam sterilizer set	1		
14	Stainless steel butt	2		
15	UV lamp	2		
16	Tympanometer		1	
17	Ultrasonic nebulizer	2		
18	Blood transfusion warmer	1		
EMERGENCY UNIT/ DAY HOSPITAL				
19	Diagnostic set	3		
20	Oxygen flowmeter set	5		
21	Defibrillator	1		
22	Pulse oxymeter	1		
23	Ultrasonic nebulizer	2		
24	Blood transfusion warmer	1		

III. SPECIAL PEDIATRIC SERVICE			
CLINIC OF PEDIATRIC CARDIOLOGY			
1	Ultrasonic nebulizer	2	
CLINIC OF PEDIATRIC NEUROLOGY			
2	Portable EEG	1	
WARD-4			
3	Blood transfusion warmer	1	
CLINIC OF PEDIATRIC NEPHROLOGY			
4	Renal biopsy needles		100
5	Haemodialysis machine	1	
CLINIC OF PEDIATRIC ONCO-HEMATOLOGY			
6	Lumbar puncture needles single use		100
7	Osseal puncture needles		100
WARD-5			
8	Blood transfusion warmer	1	
CLINIC OF PEDIATRIC PNEUMOLOGY			
9	Spirometer	1	
10	Pulse oxymeter	1	

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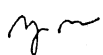
Equipment List

No.	Equipment Name	Priority		
		A	B	C
WARD-2, 3				
11	Pulse oxymeter	1		
12	Ultrasonic nebulizer	5		
13	Oxygen hood	10		
CLINIC OF PAEDIATRIC SURGERY				
OPERATING ROOM				
14	Operating table			1
15	Electrical mattress (for operation table)			4
16	Operating light			1
17	Operating light			1
18	Electric suction unit			1
19	Surgical suction tube			1
20	Anesthesia apparatus			1
21	Infant anesthesia circuit			1
22	Face mask			1+1
23	Electrosurgical unit			1
24	Electrode			1
25	Sliding stretcher			1
26	Infant stretcher			1
27	Pediatric fibercystroscope			1
28	Pediatric rigid fibercystroscope			1
29	Electrical syringe			1
30	Monitors (ECG, Respiratory Rate, Temp etc.)			1
31	Echo color doppler			1
32	Pulse oxymeter			2
33	Defibrillator			1
34	Nephrectomy instrument set (in metal case)			2
35	Mobile X-ray unit with accessories for processing (and visual facilities)			1
36	Stand (for single bassin)			4
37	Stand (for double bassin)			4
38	Stand (for double dressing drums)			4
39	Stand (for instrument tray)			4
40	Stand (solution bottle)			4
41	Foot stool			4
42	Dressing receptacle			4
43	Revolving chair			4
44	Instrument cabinet			4
45	X-ray film illuminator (for negatoscope)			2
46	Digital camera			1

Equipment List

No.	Equipment Name	Priority		
		A	B	C
INTENSIVE CARE UNIT				
47	Defibrillator	1		
48	Oxygen tent for infant	2		
49	Oxygen monitors	4		
50	Infant warmer with food	2		
51	Germicide lamp (ultraviolet sterilizing lamp)	1		
52	Intubation set	3		
53	Ambu bag (small & medium size)	5X2		
54	Surgical Incubator	2		
55	Pulse oxymeter	2		
56	Ultrasonic nebulizer	2		
57	Blood transfusion warmer	1		
58	Sliding stretcher		1	
PEDIATRIC ICU				
59	Defibrillator	1		
60	Oxygen tent	5		
61	UV sterilizing lamp		2	
62	intubation set	3		
63	Ambu bag (small & midium size)	5X2		
64	Ultrasonic nebulizer	5		
65	Blood transfusion warmer	1		

IV. CENTRALIZATION			
RADIATION ROOM			
1	Tomography X-ray unit	1	
2	Conventional X-ray unit	1	
3	Film processing set	1	
4	X-ray film illuminator (negatoscope)	4	
ENDOSCOPY ROOM			
5	Pediatric fibergastroscope and accessories	1	
6	Pediatric fibercolonoscope and accessories	1	
7	Pediatric cystofiberscope and accessories	1	
8	Video endoscopic system	1	
9	pH-Meter	2	
10	Liver biopsy needles, 1mm, 1.2mm, 1.4mm		100
11	X-ray film illuminator (negatoscope)	2	
12	Universal xenon light source for endoscope	1	
13	Washing machine for endoscope	1	
14	Endoscopic suction unit	1	
15	Electro surgical unit for endoscopy	1	
16	Endoscopic cabinet	1	
17	Endoscopic table	1	




Equipment List

No.	Equipment Name	Priority		
		A	B	C
ULTRASOUND ROOM				
18	Ultrasound apparatus	1		
19	Color doppler ultrasound unit	1		
20	Partition	1		
21	Examination table		2	
ECG ROOM				
22	Holter ECG system		1	
23	ECG	2		
24	Portable ECG	2		
25	Examination table		2	
EEG ROOM				
26	Electro encephalography (EEG)	1		
27	Examination bed		1	
28	Audiometer	1		
EMG ROOM				
29	Electromyography (EMG)	1		
30	Examination table		1	
CENTRAL PHARMACY				
31	Electric analytical balance	1		
32	Medical refrigerator	1		
33	Cabinet for medicine storage	1		
34	Prescription counter	1		
PEDIATRIC EMERGENCY LABORATORY				
35	Refrigerator	1		
36	Freezer	1		
37	Sweat testing device for mucoviscidosis	1		
38	Blood cell counter	1		
39	Spectrophotometer for electrolyte	1		
40	Centrifuge	1		
41	Staining set	1		
42	Binocular microscope	4		

Note:

A: Essential items and quantity strongly requested for the hospital services and operation

B: Requested items and quantity better to be equipped

C: Requested items and quantity preferred to be supplemented

Japan's Grant Aid Program

1. Japan's Grant Aid Procedures

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

Application (request made by a recipient country)

Study (Basic Design Study conducted by JICA)

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

Determination of Implementation (Exchange of Notes between both Governments)

Implementation (implementation of the Project)

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

Secondly, JICA conducts the study (Basic Design Study), using (a) Japanese consulting firm(s).

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

Fourth, the project approved by the cabinet becomes official with the Exchange of Notes signed by the Government of Japan and the recipient country.

Finally, for the implementation of the Project, JICA assists the recipient

country in preparing contracts and so on.

2. Contents of the Study

(1) Contents of the Study

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

- a) confirmation of the background, objectives, benefits of the project and also institutional capacity of agencies concerned of the recipient country necessary for project implementation,
- b) evaluation of the appropriateness of the project for the Grant Aid Scheme from a technical, social and economical point of view,
- c) confirmation of items agreed on by the both parties concerning a basic concept of the project,
- d) preparation of a basic design of the project,
- e) estimation of cost of the project.

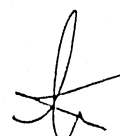
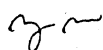
The contents of the original request are not necessarily approved in their initial form as the contents of the Grant Aid project. The Basic Design of the project is confirmed considering the guidelines of Japan's Grant Aid Scheme.

Final project components are subject to approval by the Government of Japan and therefore may differ from an original request. Implementing the project, the Government of Japan requests the recipient country to take necessary measures involved which are itemized on Exchange of Notes.

(2) Selection of Consultants

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

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



3. Japan's Grant Aid Scheme

(1) What is Grant Aid?

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

(2) Exchange of Notes (E/N)

Both Governments concerned extend Japan's Grant Aid in accordance with the Exchange of Notes in which the objectives of the Project, period of execution, conditions and amount of the Grant Aid etc., are confirmed.

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

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

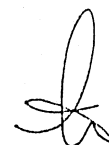
When the two Governments deem it necessary, the Grant may be used for the purchase of products or services of a third country.

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

(5) Necessity of the "Verification"

The Government of the recipient country or its designated authority will conclude contracts denominated in Japanese yen with Japanese nationals. The Government of Japan shall verify those contracts. The "Verification" is deemed necessary to secure accountability to Japanese tax payers.

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(6) Undertakings Required to the Government of the Recipient Country

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

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

(7) Proper Use

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

(8) Re-export

The products purchased under the Grant Aid shall not be re-exported

3y -



from the recipient country.

(9) Banking Arrangement (B/A)

a) The Government of the recipient country or its designated authority shall open an account in the name of the Government of the recipient country in a bank in Japan. The Government of Japan will execute the Grant Aid by making payments in Japanese yen to cover the obligations incurred by Government of the recipient country or its designated authority under the Verified Contracts.

b) The payments will be made when payment requests are presented by the bank to the Government of Japan under an Authorization to Pay issued by the Government of the recipient country or its designated authority.

Major Undertakings to be Taken by Each Government

NO	Items	To be covered by the Grant Aid	To be covered by the Recipient side
1	To bear the following commissions to a bank of Japan for the banking services based upon the B/A		
	1) Advising commission of A/P		●
	2) Payment commission		●
2	To ensure prompt unloading and customs clearance at the port of disembarkation in recipient country		
	1) Marine(Air) transportation of the products from Japan to the recipient country	●	
	2) Tax exemption and custom clearance of the products at the port of disembarkation		●
	3) Internal transportation from the port of disembarkation to the project site	(●)	(●)
3	To accord Japanese nationals whose services may be required in connection with the supply of the products and the services under the verified contract such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work		●
4	To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which may be imposed in the recipient country with respect to the supply of the products and services under the verified contract		●
5	To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant Aid		●
6	To bear all the expenses, other than those to be borne by the Grant Aid, necessary for the transportation and installation of the equipment		●

4-2 Explanation of Draft Basic Design

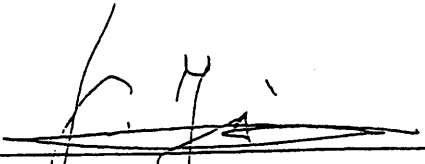
MINUTES OF DISCUSSIONS
ON THE BASIC DESIGN STUDY
ON THE PROJECT
FOR THE IMPROVEMENT OF MEDICAL EQUIPMENT
FOR THE PEDIATRIC HOSPITAL "MOTHER TERESA"
OF UNIVERSITY CENTER OF TIRANA
IN THE REPUBLIC OF ALBANIA
(EXPLANATION ON DRAFT REPORT)

In April 2000, the Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched a Basic Design Study Team on the Project for the Improvement of Medical Equipment for the Pediatric Hospital "Mother Teresa" of University Center of Tirana (hereinafter referred to as "the Project") to the Republic of Albania (hereinafter referred to as "Albania"), and through discussion, field survey, and technical examination of the results in Japan, JICA prepared a draft report of the study.

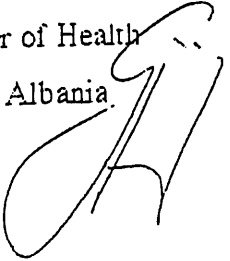
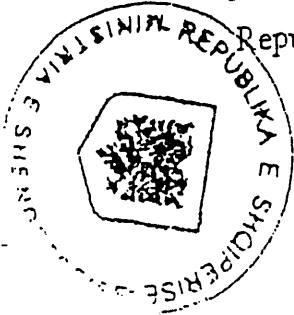
In order to explain and to consult the Albanian side on the components of the draft report, JICA sent to Albania the Draft Report Explanation Team (hereinafter referred to as "the Team"), which is headed by Mr. Kazumi JIGAMI, Director of the Second Project Management Division, Grant Aid Management Department, JICA, from July 24, 2000 to August 9, 2000.

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

Tirana, August 3, 2000


Mr. KAZUMI JIGAMI
Leader, Draft Report Explanation Team
Japan International Cooperation Agency

Dr. GJERGJI KOJA
Deputy Minister of Health
Republic of Albania.



ATTACHMENT

1. Components of the Draft Report

The Government of Albania agreed and accepted in principle the components of the draft report explained by the Team.

2. Items requested by the Government of Albania

After discussions with the Team, the Albanian side finally requested items described in Annex.

3. Japan's Grant Aid scheme

The Albanian side understands the Japan's Grant Aid Scheme and the necessary measures to be taken by the Government of Albania as explained by the Team and described in Annex-2 and Annex-3 of the Minutes of Discussions signed by both parties on April 13, 2000

4. Schedule of the Study

4-1. The consultants will proceed to further studies in Albania until August 9, 2000.

4-2. JICA will complete the final report in accordance with the confirmed item and send it to the Government of Albania around November 2000.

5. Other relevant issues

5-1. Confidential Documents

The Team handed one copy of the draft-detailed specification of the equipment to the Albanian side. Both side agreed that the draft specification is confidential and should not be duplicated or released to any outside parties.

5-2. Budget Allocation

The Albanian side confirmed to take necessary measures to secure sufficient budget for local cost that mentioned in the draft report.

The Albanian side also confirmed to secure sufficient budget for operation & maintenance cost for a haemofiltration apparatus that was strongly requested to the Team.

5-3. Endoscopy room

The Albanian side and the Team reached agreement about practical use of an operation room in the Special Pediatric Service building as an Endoscopy room.

5-4. X-Ray room

The Albanian side promised to repair X-Ray rooms completely until the installation of X-Ray units procured by the Project.

5-5. Soft Component

The Albanian side requested the consultant services for the technical guidance for efficient equipment operation by centralization and a maintenance system building of equipment as one of the components of the Grant Aid.

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ANNEX

No.	Equipment Name	Quantity
I. COMMON UTILIZATION		
I-1	Small weight scale	17
I-2	Large weight scale	17
I-3	Infant ruler	17
I-4	Height measure	17
I-5	Infrared thermometer	5
I-6	Conventional thermometer	17
I-7	Rectal-thermometer	4
I-8	Digital-thermometer	17
I-9	Sphyngnomanometer (stand-type)	32
I-10	Sphyngnomanometer (tabletop-type)	2
I-11	Hanger stand	84
I-12	X-ray film illuminator (negatoscope)	28
I-13	Monitor	38
I-14	Electric suction unit	28
I-15	Syringe infusion pump	15
I-16	Infusion pump	34
I-17	Medicine cabinet	14
I-18	Instrument cabinet	14
I-19	Instrument carriage	14
I-20	Pediatric examining table	22
I-21	Infant bed	30
I-22	Child bed	30
I-23	Bed	35
I-24	ICU bed	20
I-25	Mattress	65
I-26	Over bed table	35
I-27	Laundry cart	17
I-28	Stretcher	4
I-29	Wheel chair	4
II. GENERAL PEDIATRIC SERVICE		
WARD-7		
II-1	Diagnostic set	2
WARD-8, 9		
II-2	Diagnostic set	5
WARD-10		
II-3	Diagnostic set	3
II-4	Oxygen flow meter set	2
II-5	Hot water bottle	4
WARD-11		
II-6	Diagnostic set	1
II-7	Infant warmer	1
II-8	Oxygen face mask (small & medium size)	2X2
II-9	Resuscitation bag (small & medium size)	2X2
II-10	Oxygen flow meter set	2
II-11	Pulse oxymeter	2
II-12	High pressure steam sterilizer set	1
II-13	Stainless steel butt	2
II-14	UV sterilizing lamp	2
II-15	Tympanometer	1
II-16	Ultrasonic nebulizer	2

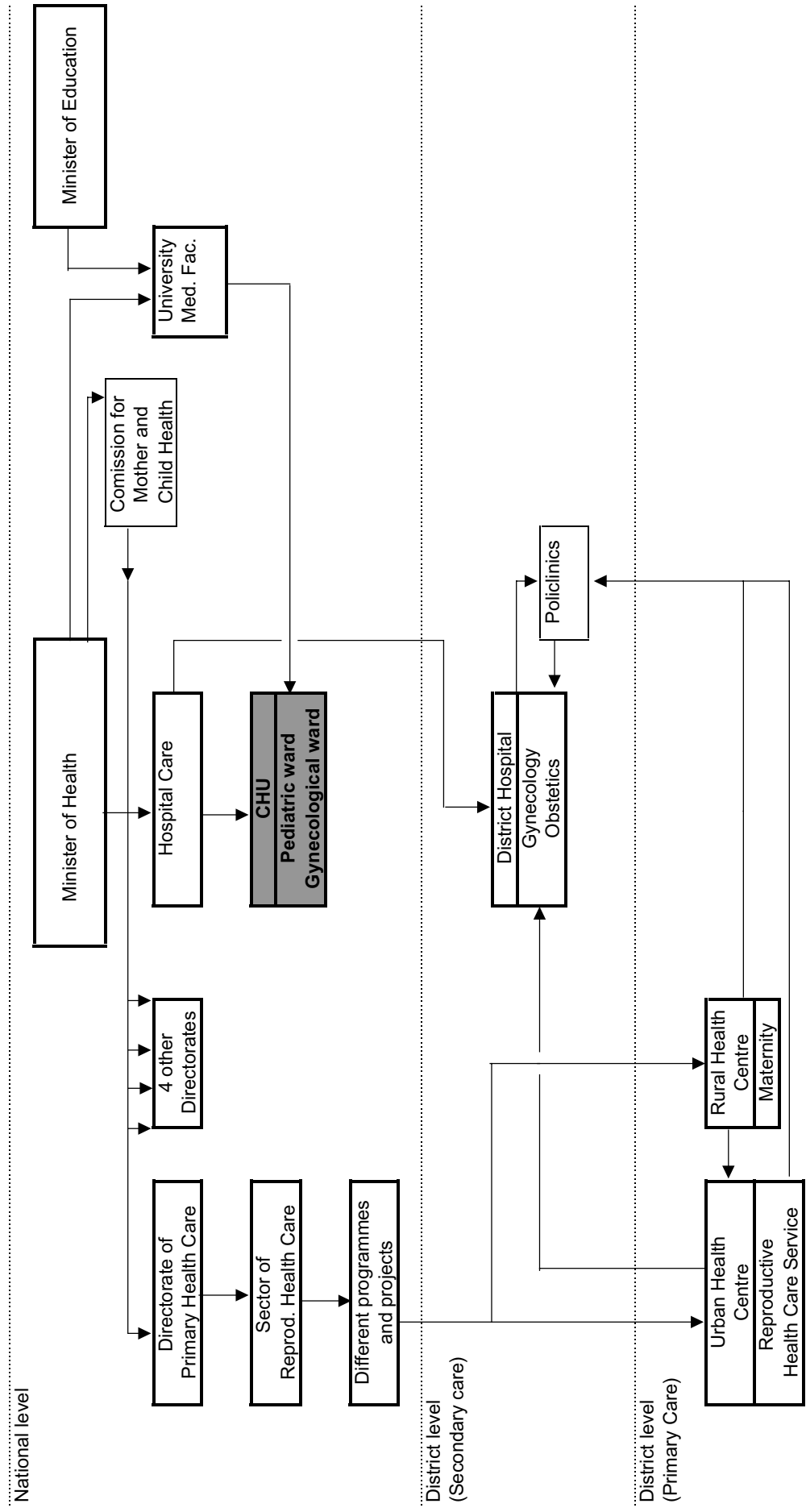
No.	Equipment Name	Quantity
II-17	Blood transfusion warmer	1
DAY HOSPITAL		
II-18	Diagnostic set	3
II-19	Oxygen flow meter set	5
II-20	Defibrillator	1
II-21	Pulse oxymeter	1
II-22	Ultrasonic nebulizer	2
II-23	Blood transfusion warmer	1

III. SPECIAL PEDIATRIC SERVICE		
CLINIC OF CARDIOLOGY		
III-1	Ultrasonic nebulizer	2
WARD-4		
III-2	Portable EEG	1
III-3	Blood transfusion warmer	1
CLINIC OF PEDIATRIC NEPHROLOGY		
III-4	Haemofiltration apparatus	1
WARD-5		
III-5	Blood transfusion warmer	1
CLINIC OF PNEUMOLOGY		
III-6	Spirometer	1
III-7	Pulse oxymeter	1
WARD-2, 3		
III-8	Pulse oxymeter	1
III-9	Ultrasonic nebulizer	5
III-10	Oxygen hood	10
SURGICAL INTENSIVE CARE UNIT		
III-11	Defibrillator	1
III-12	Oxygen tent	2
III-13	Oxygen monitor	4
III-14	Infant warmer with food	2
III-15	UV sterilizing lamp	1
III-16	Intubation set	3
III-17	Resuscitation bag (small & medium size)	5X2
III-18	Surgical incubator	2
III-19	Pulse oxymeter	2
III-20	Ultrasonic nebulizer	2
III-21	Blood transfusion warmer	1
III-22	Sliding stretcher	1
INTERNAL INTENSIVE CARE UNIT		
III-23	Defibrillator	1
III-24	Oxygen tent	5
III-25	UV sterilizing lamp	2
III-26	Intubation set (ventilator)	3
III-27	Resuscitation bag (small & medium size)	5X2
III-28	Ultrasonic nebulizer	5
III-29	Blood transfusion warmer	1

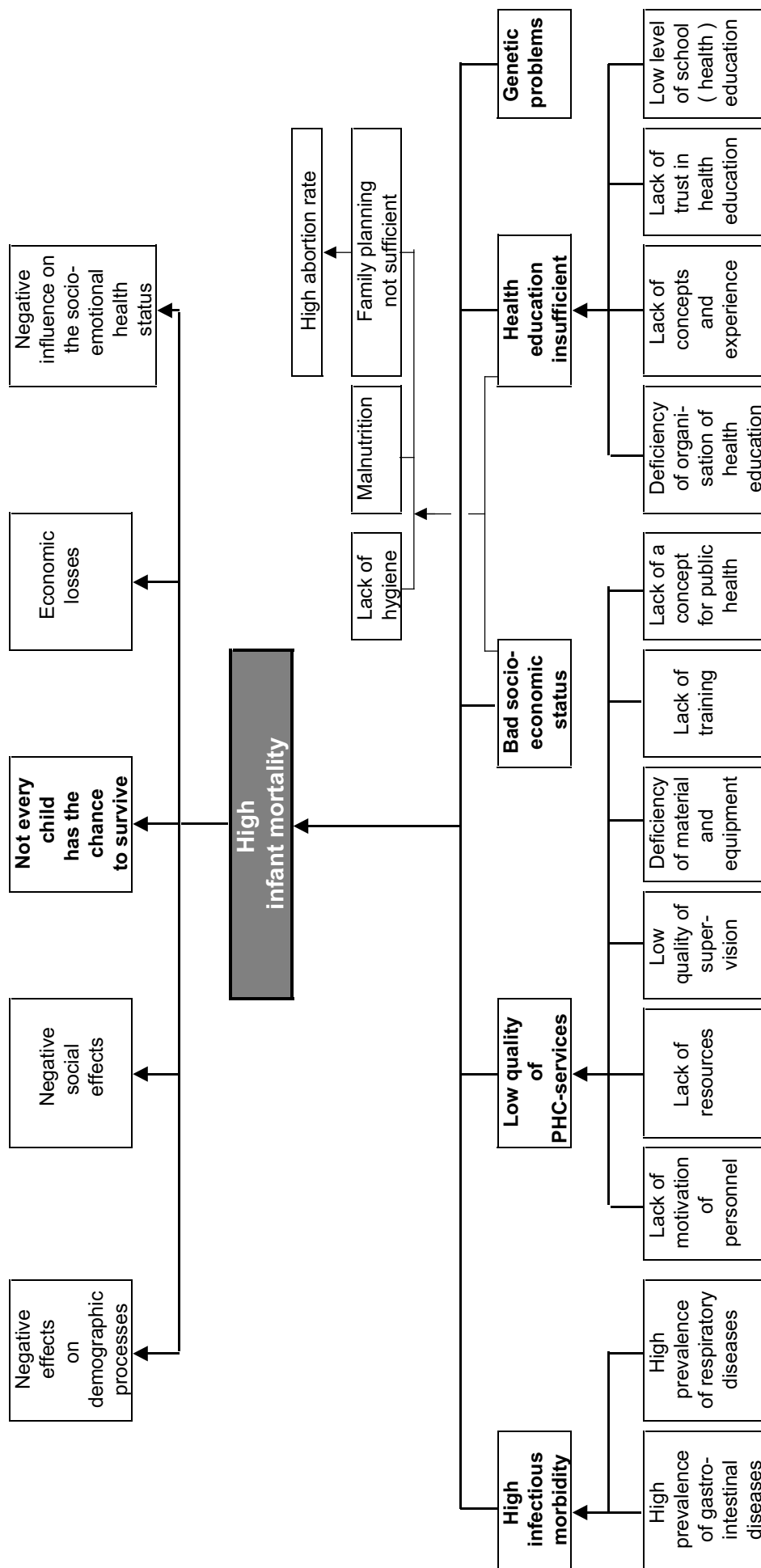
IV. CENTRALIZATION		
RADIATION ROOM		
IV-1	Tomography X-ray unit	1
IV-2	Conventional X-ray unit	1
IV-3	Film processing set	1
IV-4	X-ray film illuminator (negatoscope)	4

No.	Equipment Name	Quantity
ENDOSCOPY ROOM		
IV-5	Pediatric fibergastroscope and accessories	1
IV-6	Pediatric fibercolonoscope and accessories	1
IV-7	Pediatric cystofiberscope and accessories	1
IV-8	Video endoscopic system	1
IV-9	pH-Meter	2
IV-10	X-ray film illuminator (negatoscope)	2
IV-11	Universal xenon light source for endoscope	1
IV-12	Washing machine for endoscope	1
IV-13	Endoscopic suction unit	1
IV-14	Electro surgical unit for endoscopy	1
IV-15	Endoscopic cabinet	1
IV-16	Endoscopic table	1
ULTRASOUND ROOM		
IV-17	Ultrasound apparatus (color doppler)	1
IV-18	Partition	1
IV-19	Examination table	2
ECG ROOM		
IV-20	Electrocardiography (ECG)	2
IV-21	Portable ECG	2
IV-22	Examination table	2
EEG ROOM		
IV-23	Electro encephalography (EEG)	1
IV-24	Examination bed	1
IV-25	Audiometer	1
EMG ROOM		
IV-26	Electromyography (EMG)	1
IV-27	Examination table	1
CENTRAL PHARMACY		
IV-28	Electric analytical balance	1
IV-29	Medical refrigerator	1
IV-30	Cabinet for medicine storage	1
IV-31	Prescription counter	1
EMERGENCY LABORATORY		
IV-32	Refrigerator	1
IV-33	Freezer	1
IV-34	Sweat testing device for mucoviscidosis	1
IV-35	Blood cell counter	1
IV-36	Spectrophotometer	1
IV-37	Centrifuge	1
IV-38	Staining set	1
IV-39	Binocular microscope	4

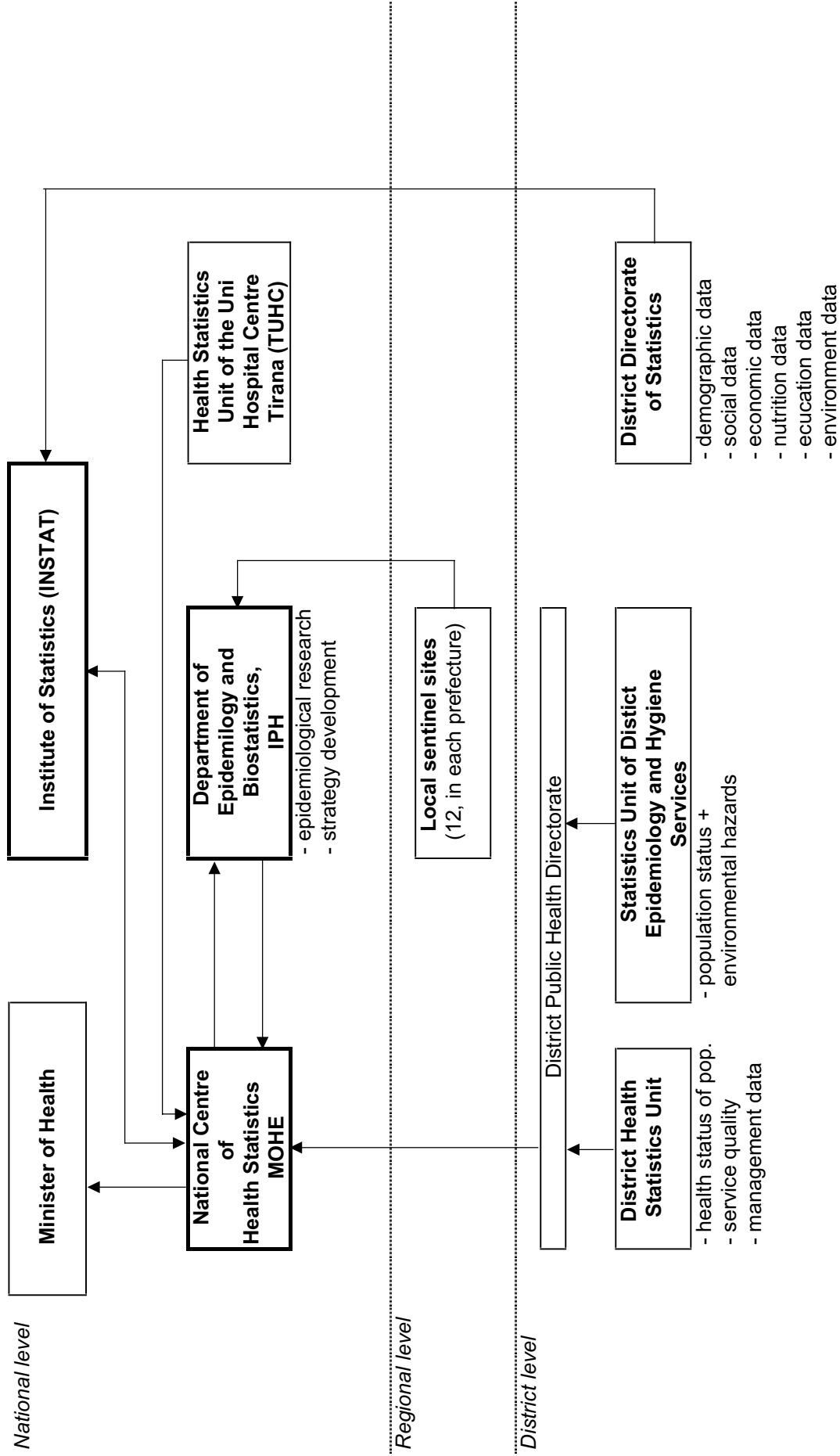
Appendix 5 Other Relevant Data



Appendix Fig. 1 National Organisation of Primary Health Care



Appendix Fig. 2 Analysis of Problems of the Primary Health Care Services in Albania



Appendix Fig. 3 Information Flow in the Health Sector in Albania

Appendix Table 1 Morbidity Data of Albania

(Absolute numbers, hospital and health centre based data)

Infectious diseases	ICD9	1990			1991			1992			1993			1994			Fatality Rate (%)
		No.cases	No.hosp.	No.deaths	No.cases	No.hosp.	No.deaths	No.cases	No.hosp.	No.deaths	No.cases	No.hosp.	No.deaths	No.cases	No.hosp.	No.deaths	
Cholera	001																
Thyphus abdominalis	002	94	92	0	102	97	0	140	129	0	59		1,748	1,586			0.0
Paratyphoid fever	002	3	1	0	0	0	0	0	0	0	0						0.0
Salmonellosis	003	2,597	1,733	16	1,371	778	4	800	629	3	835		937	676			0.5
Bacillary dysentery	004	3,261	2,058	1	1,791	1,164	1	1,188	904	1	1,410		1,939	1,269			0.0
Food poisoning	005	1,562	951	21	1,156	744	15	1,160	663	3	1,182		1,323	504			1.0
Tuberculosis	010	438	408	0	346	268	0	235	169	4	295		740	210			0.4
Anthrax	022	98	90	0	63	52	0	111	102	0	77		135	132			0.0
Brucellosis	023	42	39	0	17	17	0	62	62	0	29		117	113			0.0
Leprosy	030	0	0	0	0	0	0	0	0	0	0		0	0			0.0
Diphtheria	032	17	17	2	23	23	3	48	46	4	18		14	14			10.2
Pertussis	033	327	24	0	275	31	0	51	12	0	124		244	30			0.0
Scarlet fever	034	406	47	0	166	26	0	39	14	0	40		377	10			0.0
Erysipelas	035	260	184	0	219	170	0	138	118	0	100		94	70			0.0
Meningitis C.S.	036	86	85	4	97	78	3	57	55	2	133		73	69			3.8
Tetanus	037	14	14	4	8	8	3	7	7	2	18		14	14			
Polioomyelitis	045	0	0	0	0	0	0	0	0	0	1		0	0			
Varicella	052	4,782	23	0	1,093	12	0	191	10	0	332		541	21			0.0
Morbili (Measles)	055	428	31	0	0	0	0	0	0	0	7		29	0			0.0
Rubeola	056												3,432	13			
Encephalitis epid.	060	8	7	1	1	1	1	0	0	0	17		20	18			
Hemorrhagic fevers	065	9	9	0	0	0	0	6	6	0	1		8	4			0.0
Viral hepatitis	070	11,221	10,814	21	6,840	5,763	9	4,576	4,351	10	5,721		7,508	6,828			0.2
Rabies	071	0	0	0	0	0	0	1	0	0	0		0	0			0.0
Parotitis epidemica	072	2,598	24	0	3,102	99	1	999	45	0	4,128		2,863	154			0.0
Typhus exantemat.	080	22	22	0	16	16	0	14	14	0	33		23	23			0.0
Malaria	084	0	0	0	0	0	0	0	0	0	0		1	1			
Leishmania visc.	085	120	110	2	77	49	0	28	24	0	48		76	63			0.9
Leishmania cut.	085	7	3	0	0	0	0	1	0	0	13		11	11			0.0
Syphilis	097	0	0	0	0	0	0	0	0	0	0		0	0			
Gonorrhoea	098	130	3	0	131	0	0	98	1	0	143		52	0			0.0
Leptospirosis	100	148	125	1	75	69	0	46	44	0	50		33	31			0.4
Dermatomycosis	111	510	3	0	356	3	0	316	1	0	493		592	0			0.0
Ancylostomiasis	126	159	3	0	2	0	0	5	0	0	0		0	0			0.0
Scabies	133	23,695	6	0	18,293	7	0	26,272	5	0	31,430		12,387	3			0.0
Common cold + flu	487	574,372	1,251	10	222,398	508	0	189,338	701	0	208,309		140,257	1,048			0.0
Gastroenteritis >2y	558	113,629	4,902	4	66,886	3,224	1	41,637	2,550	1	42,182		66,458	7,379			0.0
Toxic infection?		1,309	892	0	619	483	0	543	404	0	1,079						0.0
Acute dyspepsy?		102,659	6,085	12	63,527	3,990	12	44,166	3,271	13	36,842						0.0
SIDA/AIDS		0	0	0	0	0	0	0	0	0	1		0	0			
Total		845,011	30,056	87	324,904	17,680	41	267,564	10,662	30	297,339	0	242,155	20,400	0	0	

Source: Dep. of Statistics of the Ministry of Health and Environmental Protection

Remarks:

1. Common colds and flu are the most frequent infectious diseases. 0.3% of these cases have been hospitalised.
2. Gastroenteritis under 2 years of age is second frequent and contributes very much to the morbidity of these children. This disease group do not contribute to much to direct mortality, but may be a supplementary factor for the high mortality of this age group children through respiratory disease.
3. Some of the diagnoses are not clearly defined, such as "toxic infection", "acute dyspepsy"
4. Viral hepatitis is at 5th rank. Not only vaccination should be of special concern, but also problems of risk groups (risk behaviour), blood transfusion and alimentary infection.

Appendix Tabel 2 Cost Estimation of Operation and Maintenance Cost

(1/2)

A. Operation and Maintenance Cost per Year estimated by the Project			
a. Electricity	Qty	Cost (¥)	Remarks
I-13 Monitor	38	49,200	0.1 kw x 24 h x 360 day x 38 x 0.3 x ¥5/kwh
II-12 High pressure steam sterilizer set	1	7,200	1.2 kw x 6 h x 200 day x ¥5/kwh
III-4 Heamofiltration apparatus	1	500	0.25 kw x 3 h x 125 times x ¥5/kwh
III-26 Intubation set (Ventilator)	3	15,500	0.4 kw x 24 h x 360 day x 3 x 0.3 x ¥5/kwh
IV-1, 2 X-ray unit	2	3,800	(1 kw + 2 kw) x 250 day x ¥5/kwh
IV-17 Ultrasound apparatus(color doppler)	1	6,000	0.6 kw x 8 h x 250 day x ¥5/kwh
IV-20,21 ECG	4	2,000	0.2 kw x 8 h x 250 day x ¥5/kwh
IV-23 EMG	1	200	0.2 kw x 100 x 2 h x ¥5/kwh
III-2, IV-23 EEG	2	2,000	0.2 kw x 8 h x 250 day x ¥5/kwh
IV-35 Blood cell counter	1	2,000	0.2 kw x 8 h x 250 day x ¥5/kwh
IV-29,32,33 Refrigerator	3	17,500	1.2 kw x 8 h x 365 day x ¥5/kwh
Sub Total		105,900	
b. Spare Parts and Consumables	Qty	Cost (¥)	Remarks
II-20, etc. Defibrillator	3	33,000	¥11,000/unit.year (battery, cable)
III-4 Heamofiltration apparatus	1	1,250,000	¥1,000/sheet x 125 times
III-26 Intubation set (Ventilator)	3	474,000	¥158,800/unit
IV-1, 2 X-ray unit	1	1,600,000	¥100/sheet x 16,000 sheet
IV-5, etc. Fibergastroscope	3	222,000	¥37,000/bulb x 2 x 3
IV-17 Ultrasound apparatus(color doppler)	1	225,000	¥35/person x 5,000 person + 500/roll x 5,000 person ÷ 100 person x 2 rolls
IV-20,21 ECG	4	50,000	¥20,000 /electro pad + ¥650 /roll ÷ 25 person/1roll recording papar x 1,000 person
IV-23 EMG	1	20,000	3 m/person x 100 person ÷ 30 m/roll x ¥850/roll + ¥2,500/gel set + ¥9,000/paste set
III-2, IV-23 EEG	2	220,000	¥6,000/300 m · roll x 10 m/person x 1,000 person ÷ 300 m + ¥10,000/ink + ¥10,000/paste
IV-35 Blood cell counter	1	300,000	¥30/test x 10,000 times (include regent, etc.)
Sub Total		4,394,000	
c. Annual Repair and Maintenance Cost	Qty	Cost (¥)	Remarks
I-13 Monitor	38	171,000	Annual Repair cost ¥4,500 /unit
II-11, etc. Pulse oxymeter	7	84,000	Annual Repair cost ¥12,000 /unit
III-26 Intubation set (Ventilator)	3	100,000	Cost of annual periodical inspection and adjustment (¥100,000)
IV-1, 2 X-ray unit	1	300,000	Cost of annual periodical inspection and adjustment (¥100,000)+Repair cost (¥200,000/year)
IV-5, etc. Fibergastroscope	3	100,000	Cost of annual periodical inspection and adjustment (¥100,000)
IV-17 Ultrasound apparatus(color doppler)	1	430,000	Cost of annual periodical inspection and adjustment (¥100,000)+Repair cost (¥330,000/year)
IV-20,21 ECG	4	31,000	Repair cost (¥10,000/year.standard) + Repair cost (¥5,500/year.portable)
IV-23 EMG	1	49,500	Repair cost (¥49,500/year.standard)
III-2, IV-23 EEG	2	40,500	Repair cost (¥25,000/year standard) + Repair cost (¥15,500/year.portable)
IV-35 Blood cell counter	1	240,000	Cost of annual periodical inspection and adjustment (¥100,000)+Repair cost (¥140,000/year)
Sub Total		1,546,000	
Total (a + b + c)	Qty	Cost (¥)	
I-13 Monitor	38	220,200	
II-11, etc. Pulse oxymeter	7	84,000	
II-12 High pressure steam sterilizer set	1	7,200	
III-4 Heamofiltration apparatus	1	1,250,500	
III-26 Intubation set (Ventilator)	3	589,500	
II-20, etc. Defibrillator	3	33,000	
IV-1, 2 X-ray unit	1	1,903,800	
IV-5, etc. Fibergastroscope	3	322,000	
IV-19 Ultrasound apparatus(color doppler)	1	661,000	
IV-20,21 ECG	4	83,000	
IV-23 EMG	1	69,700	
III-2, IV-23 EEG	2	262,500	
IV-35 Blood cell counter	1	542,000	
IV-29,32,33 Refrigerator	3	17,500	
Total		6,045,900	
B. Operation and Maintenance Cost per Year of Existing Equipment			
a. Electricity	Qty	Cost (¥)	Remarks
X-ray unit	1	1,300	1 kw x 250 day x ¥5/kwh
Ultrasound apparatus	1	5,000	0.5 kw x 8 h x 250 day x ¥5/kwh
ECG	1	2,000	0.2 kw x 8 h x 250 day x ¥5/kwh
EEG	1	2,000	0.2 kw x 8 h x 250 day x ¥5/kwh
Blood cell counter	1	2,000	0.2 kw x 8 h x 250 day x ¥5/kwh
Sub Total		12,300	
b. Spare Parts and Consumables	Qty	Cost (¥)	Remarks
X-ray unit	1	800,000	¥100/sheet x 8,000sheets
Ultrasound apparatus	1	158,000	¥35/person x 4,000person + ¥500/roll x 4,000person/100person x 2 rolls
ECG	1	20,000	¥10,000 /electro pad +25 person/roll recording papar x ¥650 /roll x 300person
EEG	1	220,000	¥6,000/300 m · roll x 10 m/person x 1,000 person ÷ 300 m + ¥10,000 /ink + ¥10,000/paste
Blood cell counter	1	300,000	¥30/test x 10,000 times (include regent, etc.)
Sub Total		1,498,000	
Total (a + b)	Qty	Cost (¥)	
X-ray unit	1	801,300	
Ultrasound apparatus	1	163,000	
ECG	1	22,000	
EEG	1	222,000	
Blood cell counter	1	302,000	
Total		1,510,300	

C. Operation and Maintenance Cost per Year by Donor's Equipment

a. Electricity	Qty	Cost (¥)	Remarks
Ultrasound apparatus	1	5,000	0.5 kw x 8 h x 250 day x ¥5/kwh
1 ch , ECG	1	2,000	0.2 kw x 8 h x 250 day x ¥5/kwh
Ultrasound apparatus	1	5,000	0.5 kw x 8 h x 250 day x ¥5/kwh
Poratable X-ray unit	1	1,300	1 kw x 250 day x ¥5/kwh
ECG	1	2,000	0.2 kw x 8 h x 250 day x ¥5/kwh
Sub Total		15,300	
b. Spare Parts and Consumables			
	Qty	Cost (¥)	Remarks
Ultrasound apparatus	1	20,000	¥35/person x 400person +¥ 500/roll x 400person ÷ 100person x 2rolls
1 ch , ECG	1	15,000	¥10,000/electro pad + ¥650 /roll ÷ 25person/roll recording papar x 200 person
Ultrasound apparatus	1	10,000	¥35 /person x 170person + ¥500/roll x 170person ÷ 100person x 2rolls
Poratable X-ray unit	1	51,000	¥100/sheet x 510sheets
ECG	1	50,000	¥10,000/electro pad + ¥650/roll ÷ 25person/roll recording paparx .510person x 2
Sub Total		146,000	
c. Annual Repair and Maintenance Cost			
	Qty	Cost (¥)	Remarks
Ultrasound apparatus	1	300,000	Annual repair cost (¥200,000/unit)
1 ch , ECG	1	5,500	Annual repair cost (¥5,500/unit)
Ultrasound apparatus	1	100,000	Annual repair cost (¥100,000/unit)
Poratable X-ray unit	1	150,000	Cost of annual periodical inspection and adjustment (¥100,000)+Repair cost (¥50,000/year)
ECG	1	100,000	Annual repair cost (¥100,000/unit)
Sub Total		655,500	
Total (a + b + c)			
	Qty	Cost (¥)	
Ultrasound apparatus	1	325,000	
1 ch , ECG	1	22,500	
Ultrasound apparatus	1	115,000	
Poratable X-ray unit	1	202,300	
ECG	1	152,000	
Total		816,800	

D. CT Scannor

a. Electricity	Qty	Cost (¥)	Remarks
CT scanner	1	65,000	(2 kwh x 250 day + 50 kw x 0.5 h x 500) x ¥5/kwh
b. Consumables			
	Qty	Cost (¥)	Remarks
CT scanner	1	300,000	¥200/film x 1,500sheets
c. Maintenance Contact Fee			
	Qty	Cost (¥)	Remarks
CT scanner	1	3,000,000	Unit price (¥60,000,000) x 0.05
Total (a + b + c)			
	Qty	Cost (¥)	
CT scanner	1	3,365,000	

E. Major Equipment's Operation and maintenance Cost per Unit

Total Cost of Operation and Maintenance	Qty	Cost for All Units				per Unit			
		Cost (¥)	Electricity	Spare Parts & Consumables	Repair & Maintenance Cost	Cost (¥)	Electricity	Spare Parts & Consumables	Repair & Maintenance Cost
IV-1, 2 X-ray unit	1	1,903,800	3,800	1,600,000	300,000	1,903,800	3,800	1,600,000	300,000
III-4 Haemofiltration apparatus	1	1,250,500	500	1,250,000	0	1,250,500	500	1,250,000	0
IV-17 Ultrasound apparatus(color doppler)	1	661,000	6,000	225,000	430,000	661,000	6,000	225,000	430,000
III-26 Intubation set (ventilator)	3	589,500	15,500	474,000	100,000	196,500	5,167	158,000	33,333
IV-35 Blood cell counter	1	542,000	2,000	300,000	240,000	542,000	2,000	300,000	240,000
IV-5, etc. Fibergastroskop	3	322,000	0	222,000	100,000	107,333	0	74,000	33,333
III-2, IV-23 EEG	2	262,500	2,000	220,000	40,500	131,250	1,000	110,000	20,250
I-13 Monitor	38	220,200	49,200	0	171,000	5,795	1,295	0	4,500
II-11, etc. Pulse oxymeter	7	84,000	0	0	84,000	12,000	0	0	12,000
IV-20,21 ECG	4	83,000	2,000	50,000	31,000	20,750	500	12,500	7,750
IV-23 EMG	1	69,700	200	20,000	49,500	69,700	200	20,000	49,500
II-20, etc. Defibrillator	3	33,000	0	33,000	0	11,000	0	11,000	0
IV-29,32,33 Refrigerator	3	17,500	17,500	0	0	5,833	5,833	0	0
II-12 High pressure steam sterilizer set	1	7,200	7,200	0	0	7,200	7,200	0	0
Total		6,045,900	105,900	4,394,000	1,546,000	-	-	-	-

Appendix 6

References

Title	Publication	Source
Development Plan		
Republic of Albania Public Investment Programme 1996-1998	1996	Council of Ministers Department of Economic Department and Aid Cooperation
World Bank Financial to Albania	2000	World Bank
Strategy plan of Tirana University Center 1996-2001	2000	World Bank
Economic Analysis		
An Invitation of Albania, An overview of Albania's resources an economy	1995	Besa
Statistics		
Albania in Figures	1999	Institute Statistics
Demographic Yearbook 1998	1998	Institute Statistics
Statistics of Pediatric Hospital	2000	Questionnaire of B/D Study Team
Health Indicator		
Children's and Women's Right in Albania, Situation Analysis 1998	1998	UNICEF
Tuberculosis Programme	1999	WHO
Health Policy		
Support for the Definition of a Policy and Strategy for PHC in Albania	1996	Ministry of Health / EU Phare
Health Care Systems in Transition, Albania	1999	European Observatory on Health Care Systems
Albanian Health System Reform, Position Paper on Policy and Strategy for the Albanian Health Sector Reform	1999	Ministry of Health
Kosovo Crisis Situation, District Health System Guidelines	1999	Ministry of Health
A Review of the Working Conditions of 41 Hospitals in Albania	1999	Ministry of Health
A Review of the Working Conditions of 41 Hospitals in Albania Data-book I - VI	1999	Ministry of Health

Title	Publication	Source
General Issue		
The World Fact-book 1999	1999	CIA
Blue Guide – Albania	1996	Blue Guide
Albania	1997	Agim Neza
Geographic		
Albania	1999	Inter Map Inc
Albania, Road Map and Tourist Guide	1999	Cartographia
Construction Plan of Pediatric Hospital	1999	CINS, GTZ
Floor Plan		
Document of Building Permission for Pediatric Hospital Old Building	1959	Construction Dept., Tirana City
Document of Building Permission for Pediatric Hospital New Building	1987	Construction Dept., Tirana City
Drawings for Permission of Rehabilitation in Pediatric Hospital Old Building	2000	CINS
Drawings for Permission of Rehabilitation in Pediatric Hospital New Building	2000	GTZ
Drawings of Piping for Water & Drainage in Tirana University Center	2000	Tirana University Center
Drawings of Wiring Chart of Electricity in Tirana University Center	2000	Tirana University Center